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Oil, Paint and Drug Reporter

VOL. LVI. No. 2. NEW YORK, MONDAY, JULY 10, 1899. FOR RATES SEE PAGE 5.

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NEW YORK, JULY 10, 1899.

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PROPOSED COMBINATION OF SPIRITS MANUFACTURING COMPANIES.

The advertising columns of some of the daily press of New York city have been embellished within the last fortnight by the presence of an alluring announcement inviting the stockholders of four spirits companies to take part in the proposed consolidation of the said companies in one gigantic corporation, to be known as the Distilling Company of America, and to have a capital stock of $125,000,000. The four companies in question are the American Spirits Manufacturing Company, the Kentucky Distilleries and Warehouse Company, the Spirits Distributing Company and the Standard Distilling and Distributing Company.

In view of the admitted instability of the financiering of whiskey trusts in general, and more especially owing to the erratic career of the Distillers and Cattle Feeders' Company, there seems to be a general mistrust on the part of the public with regard to anything pertaining to the reorganization or rehabilitation of industries of this nature.

This feeling has evidenced itself in connection with the proposed amalgamation of the above concerns into the $125,000,000 corporation above noted. It assumed definite shape by the occurrence of a meeting on Wednesday last of about half a hundred stockholders of the American Spirits Manufacturing Company, who gathered together at the public invitation of some of their number who were not satisfied with the proposed consolidation, nor, moreover, with the past or present administration of the affairs of their company.

The reason they are not satisfied with the proposed plan of amalgamation is that they, as stockholders of the American Spirits Manufacturing Company, would not, in their opinion, receive a fair and just apportionment of the stock of the new company as compared with the stock to be given to the shareholders of the other three companies. It was claimed, at the meeting above referred to, that their company should possess by far the most valuable assets of the four companies involved, and that, such being the case, they were justly entitled to the lion's share of any new stock. They assert, however, that their company has been conducted by its officers and directors in such a star chamber way that they virtually do not know whether their company now has even a dollar's worth of assets. This the dissatisfied stockholders propose to find out. They claim that the proposed amalgamation is nothing more than a stock jobbing scheme inaugurated by the parties who at present have the management of their company, and incidentally the management and virtual ownership of the other three companies. They also assert that the other three companies are organizations whose assets are the result of certain maneuvers on the part of the managers of all four concerns which have correspondingly decreased the assets of the American Spirits Manufacturing Company. They claim that, having thus bled the parent company, which the present management only partially owns, it is a piece of brazen assurance on the part of the management to acknowledge their actions by offering its stockholders a supposed equivalent for their holdings.

At the meeting above referred to the stockholders present were invited to co-operate with those who intended to insist upon the recognition of their rights as minority stockholders similar to those recently judicially granted in the celebrated Steinway case, and a committee was appointed to draw up a stockholders' protective agreement for signature by the dissenters from the advertised plan of consolidation.

As to the merits of this controversy the Reporter defers the expression of an opinion. Our position in connection with the matter of the Distillers and Cattle Feeders' Company was clearly defined at the time, and if the present case develops to be on a parity therewith, our position thereon may be anticipated with some degree of accuracy.

COTTONSEED CRUSHERS TO MEET IN MEMPHIS.

The Interstate Cottonseed Crushers' Association will meet in the city of Memphis on July 26 and will hold sessions during two days, possibly three. The selection of the place of meeting was probably the best that could be made, as the location is central to the industry, easily accessible and the accommodations there are all that could be wished. There are other attractions which the members recognize as making this the most desirable place for holding the meeting. The success of the meeting recently held at San Antonio leads to the belief that the Memphis meeting will be very largely attended and that the results will be even more important to this industry. The program for the meeting has not been completed, but we are assured that there will be several papers of more than ordinary interest, and matters will be brought before the association whose action thereupon may be expected to benefit every member and the industry as a whole. There are many matters which may be considered and acted upon by an organization not circumscribed by State limits, and it is hoped some reforms may be brought about. The work of this association in the matter of proposed increases of the French and German duties on cottonseed oil is evidence of the necessity for its being and equally important work is before it. It is hoped that the attendance will be large, and that it will be interesting and profitable in results we have no doubt.

POSITION OF NITRATE OF SODA.

The comparatively small spot supply of nitrate of soda has been increased by late arrivals, but as by far the larger part of these were under contract the situation has not changed as regards the supply available for prompt delivery. The stock on hand on the first of the present month was only 30,000 bags, and that available at the present writing probably does not exceed that amount. The amount now on the way and due before September is 243,600 bags, quite a large proportion of which will be required to apply on existing contracts, and the situation can therefore show no material change during the present and succeeding month, although it is not probable that the market will soon again be in the position of a month ago, when contract deliveries were retarded and sales were made in small lots in order to tide over until vessels arrived. The situation in other respects has not changed, although reports from the primary markets are to the effect that the output had been further restricted. For future delivery the same prices are quoted as for spot, and while the market is strong no important advance is expected under normal consumptive requirements, although an unexpected increase in the demand would undoubtedly be taken advantage of to raise the price.

THE ATTEMPT TO COMBINE WHOLESALE DRUGGISTS.

The proposition to amalgamate the wholesale drug trade interests of the country, to which the Reporter devoted considerable space in its issue of May 22d last, seems to savor somewhat of the characteristic of the ghost of Banquo, in that it will not down; or, to be more correct, the promoter of the scheme possesses that characteristic, which is sometimes an admirable possession, but more often an objectionable one, viewed from the standpoint of those importuned. The trade in general has continued to be favored with circulars with reference to the proposed amalgamation, some of which have embodied trifling amendments of the original plan of consolidation, but all of which have been somewhat of the same tenor as the ones issued prior to the time the Reporter gave the matter general publicity, and announced the almost universal condemnation of the project by the trade interests involved. Some curiosity has been evinced as to the identity of the firm or firms in the trade who are behind the promoter, but this curiosity has so far been satisfied with nothing more tangible than conjecture. That the promoter is "going it alone" is, and has been since the first intimation of the scheme, thought to be an unreasonable conclusion. The literary matter that has emanated from his office is undoubtedly the work of some one who has spent a lifetime in the wholesale drug trade, and who knows its ramifications thoroughly.

The reason we devote additional space to a matter that apparently is worthy of no further comment is owing to the meeting in Kansas City last week of the representatives of about twenty-six different jobbing concerns of the West and Southwest. The meeting was apparently held for the purpose of affording an opportunity to the various delegates to announce to their brethren and competitors collectively what most of them had already done individually; that is, that the particular plan in question, for the amalgamation of the jobbing drug trade of the country was impracticable and impossible of consummation. In short, as the Reporter has heretofore intimated, that the affair was virtually a fiasco. Last week's public action of the Western jobbers, in refusing, as a body, to give the scheme their support, will probably administer to the plan its final quietus, and the finis seems quite an appropriate one.

We do not think that a general combination of the jobbing druggists of the country is within the bounds of possibility; it is certainly not at this time, although such a finality might possibly be reached by a series of gradated amalgamations. We stated editorially in our issue of May 22 that "the utmost that seems within the bounds of probability would be a union of jobbers who were strictly middlemen, and not manufacturers, etc., as well." Even a general amalgamation of this class of jobbers seems to be too gigantic and too uncertain an undertaking to warrant any serious consideration.

The most that is worthy the attention of such jobbers at present is the feasibility of combination on the part of wholesalers located in the various sections of the country, each of such amalgamations to be limited to the firms within a certain territory such as, for instance, New England or New York state (outside of New York city). The desirability of such a union is a matter about which the jobbers in any such territory are best fitted to judge. If the jobbers in any or all of the various sections of the country get together and amalgamate separately, and the several combinations agree not to trespass on their united neighbors' territory, there may be beneficial results from such action. No promoter is necessary to the evolution of a desirable plan of consolidation. If the jobbers collectively think that their respective interests would be better served by being conducted as a unit, they are amply able, as business men, to inaugurate the necessary changes without the aid of any outside interests.

SHELLAC SOPHISTICATION.

In our last issue we printed two news items, both of the same purport. They referred to the receipt in this country by the agents of two Calcutta houses of powers of attorney to prosecute any parties found to be indulging in the practice of counterfeiting shellac of the brands manufactured by the Calcutta houses referred to.

The issuance of these powers of attorney, it is reasonable to be presumed, was the result of no idle, trivial thought. It was not done, it may be assumed, in anticipation of such practices on the part of American shellac dealers, but, on the contrary, because such questionable tactics were known to have been resorted to in this country. That this was the case in one instance, we are convinced is true.

It is not necessary to enlarge on the methods employed by the alleged counterfeiters. Those who buy shellac in cases know that it is an article of merchandise particularly and peculiarly susceptible to sophistication.

The practice is on a parity with that of the man who manufactures bogus currency, or who raises a check. It should receive equivalent punishment. It would seem that, should the parties who represent the owners of the marks have, or at any time in the future secure, sufficient evidence to convict any counterfeiter of their brands of shellac, they owe it, or would then owe it, to the consuming trade of this country as a protection, and to the honest shellac merchants of America as a vindication of their integrity in the eyes of said consumers and in the eyes of the shellac merchants in London and Calcutta, to prosecute the guilty parties to the fullest extent of the law, no matter whether they are at present scapegoats or presumably reputable merchants. To refuse to take public cognizance of such counterfeiting would be inimical to their own interests and also to the shellac trade of this country in general.

The decision taken last year at the Vienna Congress is to be carried out, and the fourth International Congress of Applied Chemistry will be held in Paris next year during the exhibition, under the patronage of the French Government. The meetings will be held from July 23 to 31 at the New Sorbonne, by the courtesy of the rector of the Paris University. A definite programme will be issued next Autumn, giving the names of the members of the ten committees into which the Congress will be divided, and other details. M. Berthelot will be the president of honor, M. Henri Moissan the president, and M. F. Dupont, of the Analytical Chemists' Association, secretary.

TRADE ITEMS.

[For other Trade Items see contents on page 21.]

The annual meeting of the National Paint, Oil and Varnish Association will be held in the city of Cleveland on Oct. 3, 4 and 5.

Among the cotton oil men in the city during the week were Messrs. J. G. Falls of Memphis, Tenn., and N. A. Priech of New Orleans, La.

Supplies of oils, litharge, ammonia, candles, Portland cement, etc., are required for the New York Navy Yard. Bids will be opened July 11.

The shipments of Florida phosphate rock from the port of Savannah, Ga., during the month of June amounted to 2,500 tons, all to Landskrona.

John A. Stevens, vice-president of the National Lead Company, left with his family on Thursday last for his farm in Maine, where they will spend the Summer months.

Contracts have been let for drilling a number of 3,000 feet water wells for the soda ash plant to be erected at Barberton, Ohio, by the Pittsburgh Plate Glass Company.

Edward Flash of the Williams & Flash Co., of this city, returned on Thursday last from a successful trip abroad among the consumers of cotton oil and its products.

H. C. Butcher, president of the Southern Cotton Oil Company, of Philadelphia, stopped off for a few moments on Thursday last on his way down East for his vacation.

R. P. Rowe, of the National Lead Company, left with his family on Thursday last for the hills of New Hampshire, where they will pass the Summer. Mr. Rowe will return early next week.

Six warehouses and store belonging to Carter's Creek Fish Guano Co., at Irvington, Va., were burned June 30. Loss, $10,000 to $15,000; partially insured. Main building and machinery in it saved.

On the first of July, Dr. E. R. Squibb celebrated his eightieth birthday. The Doctor is in fairly good health, and is still an active worker in the interest of pharmacy. He is known far and near, either personally or by reputation.

Bids for quartermasters' supplies were opened last week as follows: Chas. M. Childs & Co., paint, 1½c per lb.; turpentine, 49c per gal.; linseed oil, 45.95c per gal. M. Fiegel, paint, 74c per gal.; turpentine, 77¾c per gal.; linseed oil, 45½c per gal.

There was a very considerable decrease in the export of fish oil from Yokohama last year, the quantity exported being but little more than half that of the previous year; 3,370 tons, valued at £34,352, were exported in 1898, as against 6,628 tons, valued at £55,359 in 1897.

The Kentucky Refining Company of Louisville, Ky., having discontinued their New York agency, as noted in our last issue, request that all correspondence with exporters, as well as handlers of cottonseed oil for the domestic market, be directed to headquarters in the future.

The G. H. Boyd Window Glass Company located a 30-blower tank factory at Mt. Jewett, Pa., last week. Samuel J. Tappan, the pioneer manager of the Bradford Glass Company, at Hazelhurst, Pa., will manage the plant. Mr. Boyd will be president and Mr. Tappan secretary.

W. W. Dixon returned from a four weeks' trip through Canada, where he has been traveling in the interests of his firm. Mr. Dixon stayed just long enough to celebrate the Fourth with his family, and left for the British possessions of North America on the evening of the 5th.

It is learned that the Crystal Glass Company of Bridgeport, W. Va., which is largely owned and controlled by Wheeling people, has sold its plant and business to the National Glass Company for $202,500, a premium of 35 per cent. on the capital stock of the concern, which was $150,000.

The American Linseed Co. have been licensed by the Secretary of State of Illinois to transact business in that State with an Illinois capitalization of $200,000. The company was incorporated under the laws of New Jersey, with a capital of $33,500,000, and this latest move is merely to conform to the Illinois laws regarding foreign corporations.

The partnership heretofore existing between W. P. Fuller & Co., Inc., and Philip Lowengart, doing business at Portland, Ore., and Seattle, Wash., under the name of W. P. Fuller & Co., has been dissolved. W. P. Fuller & Co., Inc., will hereafter have the entire control of the business at Portland and Seattle as well as in San Francisco.

The entire plant of the J. T. Robertson soap works at Manchester, Conn., was destroyed by fire June 28. The origin of the fire has not been determined, but it is thought that it broke out in the boiler room. The company employ no watchman, and the flames had gained great headway before the blaze was discovered. The loss will exceed $25,000.

The British Consul at Valparaiso reports that "Only a small quantity of iodine, a valuable by-product of the nitrate of soda industry, has been exported from Pisagua during the past year, but this is due to the fact that the shipments are regulated by a combination which exists between all the producers in order to reduce the large stocks already held in Europe."

Among the charters granted last week at Harrisburg, Pa., was one for the National Glass Company of Pittsburgh. This is the combination of the table glassware manufacturers, and it is expected that it will now be completed within a short time, and that the new concern will have charge of nearly all the table glassware factories in the country. It will probably be capitalized at $20,000,000.

Julius Dreyfus, treasurer of the Penn Plate Glass Co., died at the Protestant Hospital, Columbus, O., June 28, from a stroke of paralysis received June 19, from which he never regained consciousness. Mr. Dreyfus was en route from Cincinnati to Pittsburgh when the stroke came, and was removed from the train at Columbus. Mr. Dreyfus was aged about 51 years, and was a prominent figure in the plate glass trade.

Baucher reports that he has recently examined a sample of powdered scammony resin, which left 16.6 per cent. of ash, and gave only 41.3 per cent. of ether extract. Genuine scammony resin yields from 3 to 8 per cent. of ash, and about 75 to 80 per cent. of ether extract. The further examination of this sample revealed the presence of large quantities of both starch and sulphide of lead (galena).—Repertoire de Pharmacie.

T. H. Wymonde, a London capitalist, is interested in a new oil and guano plant which is being erected on the Fraser River, about three miles from Stevenston, B. C. The oil works, when completed, will give employment to 100 men the year round, and during the salmon season about twice that number will be required to keep the plant in operation. The establishment will be one of the largest of its kind on the Pacific coast, if not in the world.

Tannocol is a combination of tannic acid with gelatine. It forms a grayish, inodorous, tasteless powder, almost insoluble in water. It scarcely dissolves in acid fluids or in the gastric juice, but is soluble in alkaline liquids, which decompose it, liberating the tannic acid. It is strongly recommended as an intestinal astringent, especially in chronic enteritis of children. The dose is 1 gramme repeated several times a day, or half this quantity for children. —Pharm. Zeit.

A new rule of the Stock Exchange, New York, authorizes the stock-list committee to place on the regular list any securities that have been traded in in the unlisted department for three months, provided, however, that the usual financial statements are submitted. The new rule enables the American Steel and Wire Company to have its securities listed at once instead of waiting until September for the governing committee of the Stock Exchange to again meet.

Raymond Bros. Impact Pulverizing Company, 1402 Monadnock building, Chicago, manufacturers of pulverizing and air separating machinery, which is extensively used by many of the largest manufacturers with marked success, report their construction department very busy this year, the firm having erected plants for some of the largest paint and chemical houses in this country and Europe. Many firms have duplicated their orders with the Raymond Bros. Impact Pulverizing Company, until they now have from six to ten separators in their works, which is a fine recommendation as to the excellence of the machines.

For the lighthouse at Mobile, Ala., supplies of paints, oils, etc., are required. Bids will be opened July 21.

"Seabury's Union Bitters" is to be issued at a lower price than we stated in our announcement on June 20. He now informs us that the price of the book will be "between 25 and 30 cents."

The prospectus of the Vinolia Company, limited, has been issued. The capital of the company is £250,000, half of which is in 5 per cent. cumulative preference shares and the remainder in ordinary shares. The preference shares only are offered for subscription. The vendors take the whole of the ordinary shares and 50,000l. in cash besides in payment for the good will, trade-marks, patents, registered designs, stock in trade, book debts, leases and all other property of every kind or description connected with the business. This business was originally founded in 1888, and was carried on under the trade name of Blondeau et Cie. until April, 1898, when for family reasons it was converted into a private company, with the nominal capital of £100,000, under the name of Vinolia Company, limited.

The Standard Starch Co., a new corporation, has purchased the Wakefield Rattan Co.'s building at Bradley, Ill., one mile north of Kankakee, and will manufacture starch and corn products including corn cake and corn oil, also cereal products. The capital stock of the new company is $200,000. Following are the principal stockholders: George B. Douglas, Walter D. Douglas, George F. Piper, George A. Archer, Howard M. Carter, Frank R. Sleeper. George B. Douglas is president, and Mr. Archer is treasurer. Messrs. Douglas, Piper and Archer are the men whose linseed oil mills were purchased by the American Linseed Co. Howard M. Carter is a clerk, representing unknown parties. Mr. Sleeper was formerly of the Sioux City Starch Co. and will be the practical manager of the business. The company will start with a capacity of 3,000 bushels corn a day, but are remodeling a building for a daily capacity of 6,000 bushels.

PETROLEUM NOTES.

Egan & Murphy have drilled their No. 4 on the W. Clark farm, on Elm Run, through the salt sand and have a 10-barrel pumper.

North of Chester Hill, near the bridge on Wolf Creek, Shay & McMullen have completed their test well on the Worstel farm and got a duster.

On Piney Fork, Wetzel county, the South Penn Oil Company's test on the Ball heirs' farm has been drilled in and is showing for a good producer.

In the Big Injun sand territory, in Wetzel county, the Hartman Oil Company has completed its No. 8 on the F. S. Snodgrass farm and has a duster.

Goldstein & Company's test on the J. Lamp farm on McFarland creek has been drilled through the salt sand and is a duster. It will be drilled to the Big Injun.

In the deep sand development at Stringtown, Tyler county, the test well on the Mary A. Eddy farm has been drilled in and shows for 20 or 25 barrels a day.

In the deep sand territory on Piney fork, Wetzel county, the South Penn Oil Company has completed its No. 5 on the L. J. Lemasters farm and has a 50-barrel producer.

In the shallow sand territory on the Ohio River railroad's right of way in Pleasants county the South Penn has completed its No. 4 Peters and has a 50-barrel producer.

On the east side of the Elk fork pool and south of the extension Cutler & Co. have completed their No. 4 on the Glendenning farm, and have a 30-barrel pumper. The location is 800 feet north of No. 3 on the same farm.

On the west side of the old Elk Fork development in Tyler county the Elk Fork Oil and Gas Company has completed its No. 2 on the J. W. Hill farm, located 800 feet south of No. 5 Wood, and has a 6-barrel producer.

The Devonian Oil Company's well on the Collins farm, located near Gibsonia, Allegheny county, is spraying at the rate of 25 or 30 barrels a day, and the owners will drill it deeper. A third sand well is a new feature for that locality.

The South Penn Company's well on the Rymer farm at the "Jug" on Middle Island creek, Tyler county, is holding up at 150 barrels a day. The same company's No. 10 on the Peter Ash farm in McElroy district, is making 60 barrels a day.

The Southern Oil Company has completed its No. 3 on the C. Campbell farm on McFarland creek and has a 10-barrel producer.

The Jennings & Co. well on the Zumbro farm, located east of Chester Hill, is making between 25 and 30 barrels a day. It now looks as though an extension will be found to the east of this well and it is in that direction that the most new work is starting.

Northwest of Marietta, O., operators are trying to extend the shallow sand development near Chester Hill, Morgan county. The test well on the Woodyard farm, located about two miles west of Chester Hill, has been drilled through the sand and is reported a duster.

Southwest of Conway, in the Muddy Creek District, the Tri-State Gas Company has completed its No. 1 on the Henderson farm and has a small gasser. The Tri-State Company has been very successful in securing good gassers in the Muddy Creek territory. The Henderson farm test is the lightest gasser it has encountered.

The gauges of the producing wells in the northeast extension of the Elk Fork pool making 100 or more barrels a day are as follows: Yoke & Steelsmith No. 2 Cate Morrow, 190 barrels; South Penn Oil Company No. 3 M. V. Wells, 150 barrels; Rice Farm Oil Company No. 5 H. F. Rice, 165 barrels, and Jacobs Oil Company No. 2 Aaron Jacobs, 240 barrels a day.

In Pleasant county, in Washington district, below St. Mary's, the South Penn Oil Company has completed its No. 1 on the Job Smith farm and has a duster in the Cow Run sand. The same company's No. 2 on the Denney Tennant farm on Flat Run, Monongahela county, was drilled into the second pay and made 200 barrels the first twenty-four hours.

In the Jarvisville district, in Harrison county, No. 5 on the L. E. Barnett farm has been completed and shot and made 120 barrels the ensuing 24 hours. This well is located on the east side of the Jarvisville development, and is the best producer that has been completed in that territory. Up to the time this well made its appearance the average had been about 20 barrels a day.

On Piney Fork, Wetzel county, the South Penn Oil Company has drilled in a number of good average wells for that territory. L. J. Lemasters No. 5 made 75 barrels the first 24 hours, and E. B. Lemasters No. 5 made 25 barrels the first 24 hours. No. 16 C. C. Pinnick made 40 barrels the first 18 hours. F. L. Hogue No. 11 has been completed and is good for 175 barrels a day.

In the Flat Run extension, in Monongalia county, the South Penn Oil Company has drilled in its No. 2 on the Denney Tennant farm. The well made 30 barrels the first 10 hours. No 7 on the same farm, the farthest well in advance of developments in the northeast extension of Flat Run, has been drilled in and made 70 barrels the first 24 hours from the Big Injun sand. This is a new departure for that territory. The oil was not expected till the Gordon sand had been reached.

Operations in Ritchie county are still fairly active in several localities. On Addison Run, Grant district, the Expansion Oil Company has completed its second test on the Widow Headly farm and has a small gasser in that formation. On the Roy Headly farm, on Rush Run, R. G. Gillespie has drilled his second well through the sand and has a duster. The casing has been pulled and the well abandoned. Northrup & Company's test on the Markey estate on Sheep Run, dry in the salt sand, is drilling to the Big Injun.

The big well on the English farm, on Wilson run, Washington county, O., was increased to 100 barrels an hour. Some very good producers have been drilled previously in that territory, but none of them approached in size the No. 8. Its location is not more than 500 feet in advance, and its magnitude gives the impression that they are now only getting into the best part of the pool. The well and lease in which it is located are owned and operated by Pittsburghers, Boggs Bros., Zanhizer & Steiner. They completed their first well on the English farm last January, and have continued to operate the farm in a conservative way and had a production of about 450 barrels a day up to the striking of the gusher. It is Big Injun sand territory, and this company holds leases on about 1,000 acres of territory in that locality. The latest reports gave its production at 30 barrels an hour. Nothing on the Ohio side of the Sistersville field has created so much of a sensation in the past few years.

The issue will take place of the Anglo-Dutch Petroleum Exploration, with a capital of £200,000. The company is formed particularly for the purpose of exploring for petroleum and other bituminous substances in the Eastern Archipelago and elsewhere, and of acquiring petroleum fields and interests in companies or petroleum concessions or permits. A contract with the Petroleum Maatschappy Polynesia has been procured, under which the new company will explore seventeen preliminary concessions or permits granted by the government of the Dutch East Indies, for periods of from two to five years, in the islands of Java, Madura and Sumatra, which have been purchased by, and are in course of being transferred to, the Petroleum Maatschappy Polynesia. The Polynesia Company has a capital of £200,000.

CORRESPONDENCE.

The Oil, Paint and Drug Reporter assumes no responsibility for statements contained in communications printed under this heading, nor does it by such publication indorse any opinions which a correspondent may express. The Reporter deprecates the use of fictitious names by correspondents, and is of opinion that a communication which the author is unwilling to acknowledge would better remain unwritten.

A Cotton Oil Reminiscence.

San Francisco, Cal., June 29, 1899.

Editor of The Oil, Paint and Drug Reporter.

The article in a late number of your paper on the use and adulteration of cotton oil for miners' use recalls my experience in introducing this oil into coal mines. I think I can claim to be the first in so utilizing cotton oil. It was in 1868 or 1869 that John V. Lewis called on us in St. Louis with a sample, which he had recently begun to manufacture, and said when he pressed the first barrel he had little idea what use he could make of it; but it was already used as an adulterant of lard oil. This explained why Cincinnati jobbers were offering lard oil at less than manufacturers' prices, and also the complaint of inquirers already being heard that the hog was chewing too much gum! As lard oil was then $1.25 and cotton oil 75c., the temptation to mix ten gallons or so was too great to be resisted by the honest jobber.

I ventured to buy five barrels, and it was the first cotton oil that crossed the Mississippi. I found it burned well in the miner's lamp, and offered it to a German friend who owned a coal mine in Illinois. But no; if the miners saw a barrel branded anything but lard oil they would condemn it. A happy thought struck him. "You yoost mix mit half and half, and brand it lard oil, and we'll yoost see." Soon he came back quite elated at the saving in prospect, and ordered a barrel straight cotton, branded lard oil again. He reported back all right, and the brand "Miners' Lamp Oil" was established, and I purchased corner lots till lard oil dropped below cotton oil, and, like Othello, its occupation was gone.

It seems from the article alluded to that mineral oil is now used to adulterate cotton oil. In those early days mineral and vegetable oils disowned relationship and refused to live in harmony. Perhaps they have gotten acquainted since; but if they can live together a week without separation and divorce it's news to me.

Geo. Partridge.

Tare on White Lead.

New York, July 6, 1899.

Editor of the Oil, Paint and Drug Reporter.

I beg to ask your opinion upon the following facts: Under special arrangement with a white lead company, I control the sale of their products in this city, Brooklyn, etc., buying from them and selling, in my own name, to different purchasers. In this connection a certain buyer makes claim on me and threatens suit for an allowance on the tare of the 250 and 500 lb. packages of lead in oil to a greater extent than the company I represent allow, which is 12 lbs. on 250 lb. packages and 24 lbs. on 500 lb. packages. I have submitted the matter to the company, asking them to protect me against this suit, which they decline to do.

Your valued opinion will be appreciated. White Lead.

[Where no tare is specified in a contract or sale the buyer is entitled to actual tare, and can recover the difference between the tare marked on the container or allowed on the invoice and the actual tare found. Your remedy is against the company from which the lead came, and is the same as that of your customer against you.—Ed. O., P. & D. R.]

OBITUARY.

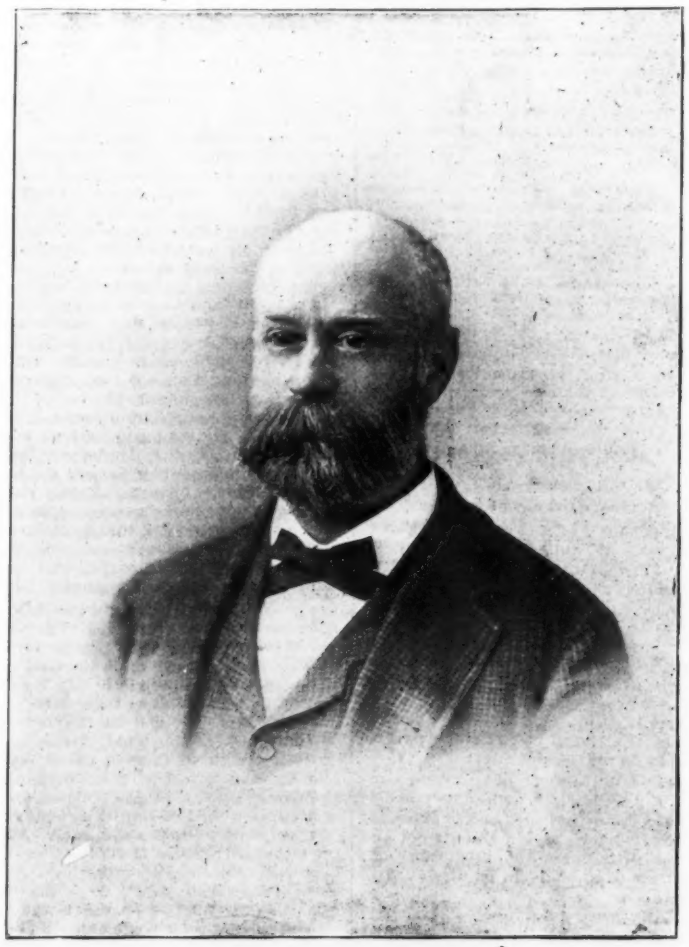
C. Lincoln Williston.

C. Lincoln Williston died on Wednesday evening last, the 5th instant, at Wayne, Pa. About one week prior to his death he suffered a paralytic shock, and the ensuing complications were such that medical skill could not overcome. Mr. Williston had been in ill health for about one year and a half, his physical troubles commencing with an attack of nervous prostration, from which he never recovered sufficiently to resume his business career.

The deceased was born at Saxton's River, Vt., on Jan. 16, 1843, and was therefore in the 57th year of his age. He left the place of his nativity when quite a boy and went to Boston, where he commenced his connection with the drug trade by securing a position with a patent medicine house, since defunct. After spending a few years in Boston he came to New York, and was for a time connected with the house of McKesson & Robbins. Later he was employed by Lanman & Kemp, and from there he went to Pittsburgh and connected himself with the Geo. A. Kelly Co. He disassociated himself with the Pittsburgh firm twenty-six years ago to accept a position as salesman with Chas. Pfizer & Co., with which firm he remained continuously until his illness overtook him, eighteen months ago. During the meantime, however, his natural executive ability and unswerving integrity, coupled with his uniformly careful attention to business matters, had caused his firm to entrust him with the management of their extensive business. When it became evident, about six months ago, that Mr. Williston would never be able to resume his active business career and that his house was permanently deprived of his services, his connection with them was severed, with much regret on the part of the firm, who were reluctant to believe and sorrowful to realize that their capable manager was physically unable to continue in that capacity.

Mr. Williston was a member of the Drug Trade Club of New York, and also a member of the Drug Trade Section of the New York Board of Trade and Transportation. He had resided in Brooklyn ever since he made New York his business home, and was a prominent member of the Montauk Club and of the Crescent Athletic Club of that city. Socially, he was very popular, and the same can be said of him in business. His strength of character was marked, and was often a matter of comment. His integrity was absolute, and he administered the business affairs under his charge in a manner that merited and received the admiration not only of his own house, but of the trade in general.

He is survived by a widow and two grown sons. The funeral services were held at his late residence, 231 Berkeley place, Brooklyn, on Friday evening last.



C. LINCOLN WILLISTON.

MISCELLANEOUS.

United States Marshal's Sale of Seized Chemical Compound.

On Thursday last, at the United States Marshal's office in the Post Office Building, the postponed auction sale of the package of chemical compound, imported by Hensel, Bruckman & Lorbacher, and forfeited to the Government for violation of the Customs Laws, took place. Prior to the commencement of the bidding, notice was served on those present by counsel for the owners of the Baur musk patent, that the "chemical compound" about to be offered for sale was an infringement of the patented artificial musk, and that any purchaser thereof would be sued. After some bidding the merchandise was knocked down to C. A. L. Massie, of counsel for the patentee, the sum of $50 being paid therefor.

The sale of the case of chemical compound, imported by George Lueders & Co., and forfeited to the Government for violation of the Customs Laws, was announced to have been further postponed until July 19.

The Fertilizer Combination.

An important circumstance in connectionwith the consolidation of Northern fertilizer companies as the American Agricultural Chemical Company is that the Bowker Fertilizer Company of Boston, one of the largest in the country, is likely to be absorbed. This company was originally reported to be in the deal, but it was left out when the new company was launched some weeks ago. A committee, however, was appointed to canvass stockholders on the matter. This committee has just reported that about two-thirds of the stock has declared in favor of consolidation. The absorption of this company will not necessitate any change in the charter of the American Agricultural Chemical Company, as of the $40,000,000 authorized capital $6,000,000, half preferred and half common, is treasury stock.

Most of the constituent companies have already been formally turned over to the new concern. There was, however, it will be remembered, a legal hitch in the case of the Lister Agricultural Chemical Works, an injunction having been obtained to prevent the sale of a large block of stock held in trust for the Lister heirs. There is now, however, a prospect that this objection will be overcome.

The constituent companies of the consolidation are: Alexandria Fertilizer & Chemical Company, Alexandria, Va.; H. J. Baker & Bro., New York; Bradley Fertilizer Company, Boston, Mass., and Los Angeles, Cal.; Chemical Company of Canton, Baltimore, Md.; the Cleveland Dryer Company, Cleveland, Ohio; Cumberland Bone Phosphate Company, Bootbay Harbor, Me.; Crocker Fertilizer Company, Buffalo, N. Y.; Detrick Fertilizer & Chemical Company, Baltimore, Md.; Jarecki Chemica Company, Sandusky, Ohio; Lazaretto Guano Company, Baltimore, Md.; Liebig Manufacturing Company, Carteret, N. J., and Wilmington, Del.; Lister's Agricultural Chemical Works, Newark N. J.; Maryland Fertilizing & Manufacturing Company, Baltimore, Md.; Michigan Carbon Works, Detroit, Mich.; Milsom Rendering & Fertilizer Company, Buffalo, N. Y.; Northwestern Fertilizer Company, Chicago, Ill.; Preston Fertilizer Company, Brooklyn, N. Y.; the Quinnipiac Company, Boston, Mass.; Reed Fertilizer Company, Brooklyn, N. Y.; Tygert-Allen Fertilizer Company, Philadelphia, Pa.; Williams & Clark Fertilizer Company, Carteret, N. J., and Zell Guano Company, Baltimore, Md.

The stocks of the company have just been listed on the Boston Stock Exchange, and application will be made to have them listed on the New York Stock Exchange as soon as the data which is required by the Exchange authorities can be collected.

Tariff of the Argentine Republic.

The following is an abstract of the customs regulations of the Argentine Republic for 1899 as regards chemicals:

Twenty-five per cent. ad valorem—Borax; hides and skins, tanned.

Ten per cent. ad valorem—White lead, ammonia, anhydrous, in cylinders; antimony, metallic; baryta, pulverized, or impure sulphate of baryta; coal tar or pitch; pitch, mineral; degras, lead in sheets, sulphate of lime.

Five per cent. ad valorem—Wire of iron or steel, galvanized or not, up to No. 14, inclusive; wire of iron or steel, barbed, for fences; sulphur, of all kinds; tin plate, unwrought, cut or not; fire bricks, lead in ingots or bars, fire clay, zinc in ingots or bars, tar oils, heavy, quicksilver, resin pitch, nitrate of potash, crude, for industrial purposes, kaolin, carbonate of soda, soda ash, industrial silicate, nitrate and impure sulphate of soda, and caustic soda, sulphate of aluminum, impure.

Two and a half per cent. ad valorem—Trinidad asphalt, sulphur, not purified, for industrial purposes, caoutchouc in natural state, fibres or wood pulp, for the manufacture of paper.

Tocopilla a Nitrate Port.

The British Acting Vice Consul William Johns reports as follows:

Tocopilla, once famous as a copper mining centre giving employment to some hundreds of Cornish miners, has now become essentially a nitrate shipping port, and its prosperity mainly and chiefly depends upon the production of this product. The quantity shipped during the past year was no less than 2,702,956 Spanish quintals, against 2,402,216 Spanish quintals in 1897, and the outlook in this direction is considered good, it being thought by some that Tocopilla is destined at no distant date to rival Iquique as a shipping port.

The oficinas for the production of nitrate, of which there are five, two British, two German and one Spanish, are situated at Toco, some 50 miles inland, on the high pampas, and here 4,000 or 5,000 men, chiefly natives, find employment. These works are reached and served by the Anglo-Chilian Nitrate and Railway Company, who also possess in the port a large and well equipped mole for the purpose of shipping direct from the cars into the launches which are used for taking the nitrate alongside the ships.

Awards for Departments Building Supplies.

The following awards have been made for supplies for the State, War and Navy Departments building during the fiscal year ending June 30, 1900:

Bidder 1. Charles Becker.
2. Toch Bros.
3. Shoemaker & Busch.
5. James B. Lambie.
6. Saks & Co.
7. George F. Muth & Co.
8. Blum Bros.
10. J. P. Nawarth.
12. E. F. Houghton & Co.
13. Standard Oil Co.
15. Mackall Bros.

Item 1. 800 lbs. alum, lump, 2c., bidder 1.
2. 200 lbs. do. ground, 2c., bidder 2.
3. 26 gals. alcohol, grain, $2.49, bidder 3.
7. 7 doz. brushes, scrubbing, $1.48, bidder 6.
8. 5 doz. do. dust, hair, $8, bidder 5.
9. 1 doz. do. whitewash, $9.97, bidder 6.
10. 2 doz. do. paint, 1 in. fitches, $1, bidder 1.
11. 3 doz. do. ½ in., 50c., bidder 7.
12. 2 doz. do. 6-0, sash tools, $1.55, do.
13 1 doz. do. 8-0, $2.30, do.
14. 2 doz. do., wall, 7 in., No. 5, $11.20, do.
15. 1 doz. do. 6-0, round, 1 lb., $14.75, bidder 3.
16. 1 doz. do. 4-0, 1 lb., $10.75, do.
17. ½ doz. do. varnish, 3½ in., $5.10 per doz., bidder 7.
29. 100 lbs. lubricating grease, 6.5c. bidder 12.
30. 5,000 lbs. lead, white, 5.39c., bidder 1.
31. 1,000 lbs. do. red, dry, $3.39, bidder 1.
39. 200 gals. oil, linseed, raw, 46c., bidder 1.
40. 300 gals. do. engine, 11c., bidder 13.
41. 300 gals. do. cylinder, 20c., do.
42. 50 gals. do. hard finish, $2.28, bidder 1.
43. 25 lbs. paint, yellow ocher, in oil, 8c., do.
44. 50 lbs. do. burnt umber, in oil, 10c. bidder 7.
45. 25 lbs. do. dry, 3.25c., bidder 3.
46. 25 lbs. do. chrome yellow, in oil 11.5c., bidder 7.
47. 25 lbs. Venetian red, in oil, 7.5c., do.
48. 25 lbs. paint, Chinese vermilion, 85c., bidder 2.
49. 25 lbs. do. English, 68c., bidder 7.
50. 10 gals. do. Japan dryers, 50c., do.
51. 25 lbs. Indian red, in oil, 12.5c., do.
52. 100 lbs. paint, Masury's burnt sienna, in oil, 11.5c., do.
53. 75 lbs. do. raw sienna, 11.5c., do.
54. 50 lbs. do. drop black, 13.5c., do.
60. 200 lbs. soap, Babbit's best, 4.5c. bidder 8.
61. 75 doz. do. glycerin, toilet, 80c., bidder 3.
62. 3,000 lbs. soap-powder, 3.59c., bidder 8.
63. 200 lbs. sponges, scrubbing, $2.48 bidder 10.
64. 200 lbs. sal ammoniac, granulated 6.75c., bidder 15.
65. 800 lbs. sal soda, 64c., bidder 3.
68. 10 gals. shellac, white, $2.40, bidder 7.
76. 200 gals. turpentine, 43.5c., bidder 3.
78. 5 gals. varnish, spar, $3, bidder 1.
79. 2,000 lbs. whiting, 89c., bidder 3.

New Corporations.

The La Puche Window Glass Co., Marion, Ind., to manufacture and sell window glass and other glassware. Capital stock, $25,000.

William T. Baker, New York City, to manufacture paint, cements, etc. Capital, $25,000. Incorporators: William T. Baker, Newark; L. E. Stevens, F. Baker, Brooklyn.

The Rainbow Color & Chemical Co., at Detroit, Mich. Capital, $10,000. The stockholders are: Theodore H. Eaton, Benjamin F. Geiger, David T. Gray and Rufus W. Clark, Jr.

The American Writing Paper Co., East Orange, N. J., to manufacture paper, etc. Capital, $25,000,000. Incorporators: Charles F. Berry, Wm. D. Gooch, Harry H. Picking.

The Elmira Glass Cutting Co., Elmira, N. Y., to manufacture cut glassware. Capital, $2,900. Incorporators: J. E. Ferris, J. C. Ferris, G. R. Ferris, B. F. Levy, all of Elmira.

The Smithport Glass Co., at Smithport, W. Va., to manufacture glass. Capital, $100,000. Incorporators: W. L. Hamilton, J. S. Curtis, C. S. Smith, J. H. Bowlby, T. A. Flynn, all of Campbell, N. Y.

The California Pharmacal Co., at San Francisco, to do a general drug business. Capital, $100,000. Incorporators: F. A. Haber, A. L. Haber, H. F. Haber, D. Putnam, all of San Francisco; G. E. Degolin, of Oakland.

The Cheshire Glass Mfg. Co., Cheshire, Mass., to manufacture glassware. Capital, $50,000. Incorporators: W. H. Smart, Boston, Mass.; R. A. Burget, Pittsfield, Mass.; G. F. Gould, J. T. Fagan, B. M. Welch, all of Portland.

The Dad Chemical Co., at New York City, to manufacture chemicals. Capital, $100,000. Incorporators: B. M. Thompson, H. A. Larson, C. Smith, of New York City; R. J. De Camp, of Roselle, N. J.; A. F. Connolley, of Port Chester, N. Y.

The Whitehall Portland Cement Co., at Philadelphia, to manufacture cements, etc. Capital, $500,000. Incorporators: J. S. Wentz, D. B. Wentz, Mary D. Wentz, E. Twining, all of Mauch Chunk; W. B. Whitney, Philadelphia, and others.

The Lard Supply.

The following estimates of the stocks of lard held in Europe and afloat on the 1st inst., to which are added estimates named, are furnished us by the N. K. Fairbank Company:

	1899, July 1.	1899, June 1.	1898, July 1.
Liverpool & Manchester.	52,000	48,000	54,000
Other British ports....	7,500	10,000	13,000
Hamburg	8,000	10,000	28,000
Bremen	3,000	3,000	4,000
Berlin	2,000	3,000	4,000
Baltic ports	8,500	9,000	10,000
Amsterdam, Rotterdam, Mannheim	2,000	2,500	2,500
Antwerp	10,000	6,000	10,000
French ports	7,000	5,500	9,500
Italian & Spanish ports	1,000	1,000	1,000
Total in Europe	101,000	98,000	136,000
Afloat for Europe	70,000	72,000	50,000
Total in Europe&afloat.	171,000	170,000	186,000
Chicago contract	196,738	164,222	168,234
Chicago, other kind	13,620	8,983	13,532
East St. Louis	14,000	11,052	2,084
Kansas City	30,013	26,610	17,578
Omaha	5,752	5,131	4,408
New York	13,036	14,009	13,913
Total, tierces	444,159	400,007	405,749

Latest Tariff Decisions.

Nitrosodioxynaphtalin.

C. Bischoff & Co. protested against assessment of duty at 30 per cent. on merchandise named in the invoices as nitrosodioxynaphtalin, under paragraph 15, Act of 1897, and claimed exemption from duty under the provisions of paragraph 524 (as naphthalin or otherwise), or paragraph 464, or to be dutiable at 20 per cent. as a product or preparation of coal ta under paragraph 15 of said act. In overruling the protests, the Board of General Appraisers finds as matters of fact:

(1) That the article in question consists of a reddish brown dry powder, produced from coal tar, and is intended and adapted for use in dyeing wool and perhaps other fibers and substances.

(2) That it has only to be dissolved in ammonia or other alkaline liquid to produce a green color upon fibers, particularly wool, and the usual application of acetic acid to hold or fox the color.

(3) That it is a coal tar dye or color.

Papaw Milk.

In the case of the American Ferment Company, the merchandise was described in the invoices as papaw juice, papaw milk, papaya milk, dried papaya milk, succus papaya, or liquid papaya milk, and was assessed for duty at 25 per cent. as a medicinal preparation. The importers claimed free entry as a crude non-edible drug. Following G. A. 3687 and the confirmatory ruling of the United States Circuit Court, the Board of General Appraisers has sustained the importer's claim.

Col. Tichenor dissents, as follows:

I must dissent from the conclusions of the majority of the board in these cases.

The merchandise in controversy comprises 24 individual importations, covered by that number of protests made by five different importers, is described in the invoices as "papaw milk," "liquid papaya," "dried papaya milk" and as "succus papain," and is valued variously (in the invoices) at $2, United States currency, and at 13s. 6d., 14s. and 15s., sterling, per pound.

Its variability in quality and commercial character and value is thus clearly apparent. Nevertheless the board's finding and conclusion as to the condition and character of all the merchandise appears to be based upon the unsupported testimony of a representative of one of the protesting importers only and without the presentation to, or inspection by, the Board of a sample of any of the importations.

I am of the opinion that such evidence is not sufficient to overcome the reports as to the precise character of the merchandise made by the expert examiner in the Appraiser's department who had it before him in each instance, and who, as more particularly appears hereinafter, gave it careful examination and is competent to determine its exact nature and commercial character. Even if the testimony of one interested witness was sufficient to establish the character of the importations of his own firm, it certainly would not be as to the importations of other importers, nor to establish a commercial usage, particularly respecting merchandise of such variable character (Neuss, Hesslein & Co. vs. United States, Treasury Synopsis 17002).

According to the United States Dispensatory, edition of 1894 (pp. 1712-1713, under the title Papaya), the milky juice of the papaw (Carica Papaya) is obtained by scarifying the skin of the unripe fruit. The milk, upon standing for a few minutes, separates into two parts, an aqueous liquid and a white, somewhat coagulated pulpy mass. The aqueous portion contains an albuminous substance, to which the names Papain and Papayotin have been given. It further appears from the Dispensatory that "Papaya juice has a tendency to spoil by undergoing a butyric fermentation, but M. Woerts found that the addition to it of glycerine preserved it without interfering with its digestive power. Imported in this form it is a thick, milky liquid. As it occurs in commerce, papain is a grayish, fine powder, which in appearance, odor and taste strongly suggests pepsin. Recently it has been much used as an internal medicine in dyspepsia and gastric catarrh, and as a local application for the destruction of false membranes, warts, tubercules, walls of old sinuses, and even epithelioma. Jacobi affirms (Therap. Gaz., Vol. II.) that diphtheric membranes are dissolved in a few hours by the hourly application of one part papain to two parts each of water and glycerin. * * * Under the name of papayotin, papain or papoid the more or less impure ferment of the carica papaya is put upon the market, and according to various authorities, it acts powerfully upon starch to convert it into maltose, emulsifies fat and converts albuminoids into peptones."

It would thus seem that the milk or juice as obtained from the fruit, with the addition perhaps of glycerin for the purpose of preservation, is the only condition in which the article can be considered as a crude drug under the present tariff act. When in the form of powder, as here imported, it has clearly been advanced from a crude condition by some process, and, as appears from the United States Dispensatory, is used as a medicine in that condition.

It appears from the testimony taken by me of Dr. G. W. Jewett (who has been an examiner of drugs and medicines in the Appraiser's department at this port for thirty-two years and is a physician by profession), that the product of the papaw fruit (carica papaya) has been imported at this port in the form of milk or juice, of a cream-like consistency, in cans, also in dry pieces or fragments of a yellow brown or straw color, but that the greater proportion imported in recent years has been in dry pulverized form of a straw or cream color, or of a grayish-white color in the condition of an impalpable powder, and that in these latter forms it was, in his judgment, ready for medicinal use. As appears from his testimony, Dr. Jewett furnished me a sample, in the form of a yellowish powder, representing an importation by the Charles Roome Parmele Company, per St. Paul, April 26—or 22, 1897—(protest 23,442-F); also a sample in the condition of an impalpable powder and nearly white in color, representing an importation by Samuel Godwin's Sons, per St. Paul, Jan. 5, 1899—or Dec. 30, 1898—(protest 47,832-F); also, that he furnished me a sample in liquid form in a bottle marked "papaya juice, undried, glycerin added as a preservative," which he obtained from the American Ferment Company, of Jersey City, N. J., but which does not appear to be included in any of the importations in question.

These samples were submitted to the United States Appraiser at this port for technical examination by a chemical expert in the laboratory connected with his department, and that officer reports in effect (1) that the two first-mentioned samples have undergone one or more processes of refining, and are in condition for medicinal use, the clear papaya juice having been first separated from the pulp and membranous or other tissues of the fruit, was concentrated, then alcohol or other similar precipitant was employed to separate the enzyme or ferment, called papain, from the residue of the papaya; and (2) that the liquid sample marked "Papaya Juice, undried," etc., appeared to be the natural juice of the carica papaya, to which glycerin had been added as a preservative during transportation and keeping, albuminous matters, other than papain, and protoplastic and membranous tissue of the fruit, also free acids natural to the fruit, being present, and the amount of papain being hardly one-half of that used in the glycerin solution of dissolved papain prescribed for medicinal purposes.

The board held in G. A. 633 that certain so-called "carica papaya," "papain," "papayotin," or vegetable pepsin, in the condition of a grayish-white powder, was a medicinal preparation dutiable at 25 per cent. ad valorem under the tariff act of March 3, 1883, and not at 10 per cent. ad valorem as a crude drug advanced in condition by grinding, as claimed by the importers. It was also held by the board in G. A. 1853 and other decisions that merchandise of similar description, prepared from the milky juice of the unripe fruit of the papaw tree, was dutiable, under the tariff acts of 1890 and 1894 as a medicinal preparation, in the production of which alcohol was used. As appears from the department's letter, dated May 11, 1899, to the Collector of Customs at New York, the merchandise was held to be so dutiable by the United States Circuit Court for the Southern District of New York in its decision rendered April 14, 1899, in the suit of R. F. Downing & Company vs. United States.

The Appraiser's returns and special reports, and the Collector's reports to the board, show that four of the importations covered by the board's decision in these cases were returned and assessed for duty at 25 per cent. ad valorem as a medicinal preparation, either under paragraph 58 or 59, act of Aug. 28, 1894, or paragraph 67 or 68, act of July 24, 1897; and that the remaining twenty importations were returned and assessed for duty at 20 per cent. ad valorem as a wholly or partly manufactured article under Section 3, act of Aug. 28, 1894, or Section 6 of the present tariff act, in accordance with the department's instructions dated Dec. 21, 1896 (ss. 17,613). It is claimed in the protests that the merchandise is either exempt from duty under paragraph 470 or 558, or dutiable at 10 per cent. ad valorem under paragraph 16½, or at 10 per cent. or 20 per cent. ad valorem under Section 3, act of Aug. 28, 1894, or is free of duty under paragraph 548 or 617, or is dutiable at 10 per cent. or 20 per cent. ad valorem under Section 6, or at one-fourth of 1 per cent. per pound and 10 per cent. ad valorem under paragraph 20, act of July 24, 1897.

It seems apparent to me that the merchandise which was the subject of the Board's decision in G. A. 3687, and of the court's decision in the suit of U. S. vs. Godwin, et al., was quite different in character from that here in question, as represented by the samples furnished by Dr. Jewett, otherwise that the board and the court misapprehended the true character of the merchandise in controversy in that case. Certainly the preponderance of evidence is to the effect that the merchandise in question here is in condition for use as a medicine; that it is "manufactured in whole or in part," and that it has been "advanced in value or condition by refining, grinding, or other process." In any event, I am persuaded that if the qualifying words "of manufacture" had not appeared in paragraphs 16½ and 470 of the tariff act (of 1894), the court would not have held that the merchandise there in question was exempt from duty, as it clearly appears from the board's decision in the case that it had been advanced from the crude state by evaporating, purifying or cleansing, or other process.

The omission of these words ("of manufacture") in paragraph 20 and 548 of the present tariff act manifests clearly an intention on the part of the Congress to make a marked change in the meaning from that of the corresponding provisions in the previous acts. This is emphasized by the fact that the same words used in paragraph 336, act of 1894, were reproduced in paragraph 614 of the present act. The only reasonable inference is, that if a drug is advanced in value or condition, no matter how, it is excluded from paragraph 548. It is to be noted that these words, taken together, do not provide for all drugs, but only for "drugs, such as barks, beans," etc. They should be read, "such drugs as barks, beans," etc. The words "such

as" were interpreted in this way by the Court of Appeals in the U. S. vs. MacSorley, et al. (65 Fed. Rep., 492). The words, "all the foregoing, which are drugs" etc., also indicate that this is the true construction. (See G. A. 4188).

The merchandise here in question is not a bark, nor a bean, nor a berry, nor any one of the articles named in paragraphs 20 and 548. It is produced from a fruit, but in the condition as imported is not a fruit, either crude or refined, ground or unground, any more than quinine is a bark, or than cider is apples. Neither is it exempt from duty under paragraph 617, which provides for "moss, seaweeds and vegetable substances, crude or unmanufactured, not specially provided for in this act." It is, to be sure, of vegetable origin, but is not ejusdem generis with moss and seaweeds (Dodge, et al., vs. United States, 84 Fed. Rep., 449.)

It appears that the article is used wholly or chiefly, in one form or another, as a medicine, and it certainly is not in the crudest form in which it is shown to commerce, or in which it has been and can be imported. In this respect it differs from the Elaterium passed upon by the court in U. S. vs. Merck (66 Fed. Rep., 251). It is true that it is sometimes further manufactured into a medicinal proprietary preparation, such for example, as "Caroid," but paragraph 68 of the present tariff act provides for all medicinal preparations, whether proprietary or otherwise.

I am of the opinion that the protests should be overruled.

The concurring opinion of Judge Somerville is as follows:

"In my opinion the precise question raised by these protests was settled in the case of United States vs. Godwin, 91 Fed. Rep., 753, decided by the Circuit Court for the Southern District of New York, which followed in principle the decision of the Circuit Court of Appeals (2d Circuit) in United States vs. Merck, 66 Fed. Rep., 251.

"The testimony at the hearing, and the description of the merchandise in the several reports of the local appraisers leaves no doubt in my mind that, under the principle settled by these decisions, the goods were improperly classified by the Collector as medicinal preparations, and are crude nonedible drugs within the meaning of paragraph 470, of the tariff act of 1894, and of paragraph 548 of the act of 1897.

"When these questions of tariff classification are once settled by the courts, and acquiesced in by the Government as well as the importers, it seems to me that the principles adjudicated should be adhered to by all subordinate tribunals so as not to disturb the commerce of the country."

The Bichrome Industry.

Bichromate of potash, as technically named, or bichrome, as commercially called, has been known as a dyer's chemical since the beginning of the present century. During the first years of the century, however it was hardly heard of outside the laboratory, and was not produced except in experimental, or, at least, very insignificant quantities. Its valuable qualities in the dyehouse came somewhat tardily into recognition, and during the first quarter of the century it had been but sparingly used in trade.

About seventy years ago the extension of the dyeing trade in Glasgow and the growing industry of calico printing following in the wake of textile manufacturing, first made feasible the production of bichrome on a fairly commercial basis. At that time the brothers John and James White, sons of Dr. White, of Paisley, rented a disused soap works at Ruthergien, near Glasgow, and there established on a very modest scale the nucleus of the large and straggling congeries of buildings since known as Shawfield Chemical Works.

From the beginning the product of the works has been bichromate of potash, and so rapidly did it gain place as a staple in the dyeing and calico printing trades that Shawfield works soon grew to considerable dimensions, and the output speedily rose from tens to hundreds, and from hundreds to thousands of tons per annum. Notwithstanding this growing demand, the monopoly of the manufacture long remained in the hands of the original makers, who had thus the regulation of both production and price, and this price was at a very profitable level. The cost of raw material and transport was higher then, and the outlay at every stage of the manufacturing process was much greater than in later years, but at the 18 pence a pound charged in these halcyon days the profit realized was a wonderfully fat one. Even when reduced to a shilling, and to tenpence, assuming cost price as double what it now is, the profit was not far from cent. per cent. But this condition of unopposed trading felicity could not always last. It is difficult to see how Glasgow should have been allowed so long to remain not only the centre but the sole habitat of the bichrome manufacture. Coal, it is true, is easily obtainable, but all raw material has to be imported here the same as to other parts of the United Kingdom; muriate of potash from mid-Europe, pyrites from Spain, and chrome ore from Turkey and Greece. After a long and prosperous career as monopolists the Shawfield firm had to submit to the intrusion of a strong rival when Messrs. Stevenson & Carlisle, ltd., established themselves as manufacturers of bichrome at Milburn street, Townhead, Glasgow, and soon the new entrants were turning out a pretty liberal moiety of the total production. Reduction in selling price was resorted to as a weapon against the invaders of the trade preserve, but this was not carried to any very serious extent, and the resulting 10d. per pound left a margin between cost and selling price sufficient to insure a splendid return to both sharers in the now divided industry. The two firms continued to rub along, with no great mutual liking mayhap, but without attempt at running each other off the field.

This peaceful state of matters continued a good many years until, in the early seventies, another claimant entered for a share of the abundant earnings of the bichrome trade. The Eglinton Chemical Company, a limited liability concern consisting of a couple of dozen shareholders carrying on business as limestone quarry .essees, began to build chemical works at Irvine, a seaport on the Ayrshire coast about 30 miles from Glasgow. It could not long be hidden that these works were to be used exclusively in the manufacture of bichrome, and the established manufacturers were from the first distinctly inimical. The tempting (by a bigger salary and a donation of shares) of the Shawfield Work's manager into the service of the new company did not tend to sweeten matters, and no sooner were the Irvine works ready to make their first deliveries of bichrome than the price was dropped twopence per pound. This made the selling price 8d. per lb., but with improved methods of manufacture and consequent reduction in cost of output, profits were still more than handsome. But the selling price was not allowed to remain long at this slightly reduced rate. It was evidently thought the new company could be shouldered off the track, or at least seriously crippled before the older and better equipped makers were much the worse. So, in a twelvemonth, another penny was dropped. Even at 7d. per lb. the price was quite sufficient to keep the new company in heart, and stubbornly the contentious race was continued. From year to year another and another penny was dropped, bringing the price to 5d. less 6 per cent., at which point a pause was made, and this figure held for several years. Then the struggle became keener, but as the margin of profit was now so much lessened the paring down had to be done with less lavish hand, and successive reductions were made by a halfpenny, and latterly by a farthing a pound. As matter of course the longer this struggle lasted the more embittered did it become, and the more was personal rancour infused. In less than five years from the start of the Irvine works the price of bichrome was reduced from 10d. to 5d. per lb. But this comparatively low-level mark being reached only made the strife more venomous and hope of compromise more unlikely. At this time, be it remembered, nearly the whole consumption of Europe (of the world it might almost be said) was supplied by the Glasgow and Irvine manufactories. A manufactory in the neighborhood of Moscow produced nearly all that was needed for Russia, but no part of this production was exported; and, now and then, taking advantage of a favorable turn in freights or tariffs, the Scotch makers managed to place a few hundred tons in St. Petersburg at a trifle under the price obtainable here. The United States of America also manufactured their own supplies to a large extent, but several thousand tons annually were also taken from this country at a slight reduction on the home price. With something like a monopoly of the world's markets for bichrome there was no need for the Glasgow makers cutting prices so ruinously against each other, but even with this absence of outside pressure the strife went on. Fraction by fraction the 5d. per lb. was whittled down to 4d., and then, by one per cent. at a time of augmented discount, the lowest point touched in this unnecessary struggle, 3½d. per lb. less 10 per cent. was reached. This is equivalent to 3.15d. net, and the cost price at that time was not much short of 3d. per lb., say 2.75d., leaving a profit of 0.4d. per lb., or a little over 10 per cent. on selling price. Thus, in little more than a decade, a manufacture which had all along remained in so few hands as to be a practical monopoly, was forced down by the makers themselves until a very narrow margin alone remained of the abounding breadth of profit formerly realized. But now, either the folly of the whole procedure or the loss imminent upon a continuance of the strife, had come home to the three parties concerned. Tentative soundings of the three West of Scotland makers were begun; negotiations were duly opened which, after some months, resulted in an agreement, the only other maker in Britain (Sowerby Bridge, Yorkshire), producing only a few tons per annum, acquiescing.

The terms of the agreement were, that each maker should adhere to an officially recognized price and produce only the quantity allotted as his share of the total production; about one-half being allowed to the Shawfield Works; the remainder, in agreed proportions, being made over to the Townhead and Irvine makers; Russia and American shipments to be mutually supplied in like proportions; and breach of terms to be punished by heavy fine. With such secrecy and success was the agreement arrived at, and so complete was the ignorance of the dry-saltery trade of any impending change of policy, that many of them had sold back to makers at the low price considerable quantities of bichrome held. Then, simultaneously, the three manufacturers issued their circulars announcing to the astounded drysalters that the price of bichrome of potash was raised to 5d. per lb. less 5 per cent.

An attempt was afterward made to bring the price to a higher level. The figure was set at 7d., then reduced to 6d., but this could not be maintained; and the introduction of bichromate of soda into the trade made impossible any further attempt at levelling up.

Thus ended the war among the manufacturers, and this "triple alliance" was well and loyally adhered to.

Then, several years later, the big syndicate was proposed, which eventually took the concrete form as the United Alkali Co., limited. Overtures were made to all the bichrome makers for the purchase of their works, but in one case only (Eglinton Chemical Co.) were the proposals entertained, the other two makers, Shawfield and Townhead, Glasgow, declining to treat. The Irvine Works were acquired by the U. A. Co. as a going concern for the lump sum of £180,000, but, shortly after taking possession, the company decided to give up the manufacture of bichrome, and so ceased to influence the trade.

The bichrome manufacture in this country is now confined to the two makers at Shawfield and Townhead, Glasgow, who have maintained close agreement, and sell their joint production through an agency. But now the long enjoyed and undisputed possession of the European field as an outlet for their production is no longer theirs. Works are springing up on the Continent, notably in Germany, and not only are continental wants in large measure supplied, but even the home market is not secure from this new competition. Under these altered conditions the price, which, at the advent of the United Alkali Co. in 1890, stood at 5d. less 5 per cent., has now droped to 3¼d. less 6½ per cent., a figure fully 3½ per cent. under the lowest price touched in the crisis of the internecine war.

A curious indirect, but, perhaps, inevitable, result of the long and bitter rivalry among the makers of bichrome, is the effect this had on the procedure of those middlemen who, during that fighting period, supplied the article to the actual consumers; and the attitude eventually assumed by dealers and consumers. These dealers had, at first, just, if not handsome, profits, but, when the cutting fairly set in among makers, dealers began to cut also, and customers were ready nough to take advantage of the new policy. Orders came to be procurable only by those who could, or would, quote a trifle (one, or even a half per cent., was about the extent of the lure) under their neighbors. Drysalters, accordingly, diligently underbid each other, trusting to come out right by playing off maker against maker, and securing concessions sub rosa or otherwise. But, when the makers combined and raised the price to a figure to pay themselves, the drysalters found it impossible to follow so excellent an example. A league embracing three manufacturers was easily initiated, and maintained with a solidity unattainable by the hundreds of outside dealers. So it fell out that dealers have now to be content to turn over bichrome practically without profit, or leave it alone. So fully is this recognized that none of them hanker after the trade; they don't ask orders, and only consent to fill them for regular customers, or when accompanied by orders for something else more profitable.

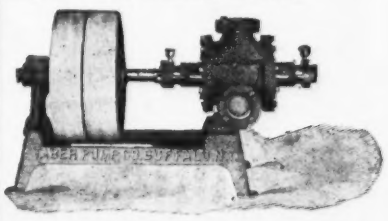
About 1880 there was considerable talk over a new process of tanning leather by the use of bichrome. A German chemist was the inventor, and the process was taken up and exploited in this country by the Eglinton Chemical Company. The leather trade was deluged with pamphlets setting forth the merits of the new process, which was to produce better leather at half the cost of ordinary methods. Licenses were offered under the patents, with royalties payable on basis of output, and nothing less was aimed at than complete revolutionizing of the leather trade. The promoters of the new process anticipated an enormous increase of consumption in bichrome, all of which, of course, was to be bought from them by their licenses. But leather people are not easily carried away; nobody wanted a license, and after the expenditure of a large amount of money the chemical company were left to work the process themselves on a very small scale. After the expiry of the patents, the process, or a modification of it, was adopted here and there, and worked on very restricted lines. But experience has shown that bichrome can only be safely used in very minute proportions, as a coloring, rather than a tanning agent. "Chrome" gives the leather little except its name, and the process has had no practical effect on either the production or consumption of bichrome.—Chemical Trade Journal.

The Taber Pump.

Among the recent up-to-date machinery for use in the cottonseed oil mills comes the Taber pump, made by the Taber Pump Company, of Buffalo, N. Y. They have designed expressly for the oil mills a line of pumps that must surely find a very ready place, especially among those manufacturers who have been looking for a suitable machine for handling "soap stock" and oil.

The Taber Pump Company, with over thirty years' experience in the business, have solved this problem of handling "soap stock" without any of the annoyances that have heretofore been experienced in the trade.

The Taber rotary pumps are by no means an experiment, as they have been in constant use for over thirty years among the tanners and soap makers of the United States, where they are most favorably known.



The simplicity in the construction of the Taber pump is a feature that must commend itself favorably to the cottonseed oil trade, as the working parts are fewer than in any other known make of pump, whether it be direct acting, steam or rotary type. The valves in the Taber pump being constructed without springs makes the action positive, and they do not depend upon speed to create a vacuum, operating equally as well at slow speed as they do at maximum speed. The openings in these pumps are large and free, so that they will deliver any liquid stock that can be passed through the suction inlet.

From an economical standpoint the Taber rotary pumps must certainly recommend themselves strongly to the oil trade, as the first cost is less than that of many other makes, and the fact that they will wear from eight to twelve years without repairs is strong evidence of their durability.

The Taber Pump Company guarantee all pumps that they install in the cottonseed oil service, which fact is a strong assurance of their efficiency.

The above cut represents their No. 2 "soap stock" pump. Illustrated catalogues of their entire line can be obtained by addressing the company.

The Taber Pump Company have an up-to-date manufactory fully equipped with all modern machinery, and are in a position to fill orders promptly.

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PAINT MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 35.

Saturday Evening, July 8, 1899.

The holidays have broken in the past week and interfered with business to a considerable extent. A large number of firms are taking a semi-annual account of stock, which also has had a tendency to restrict trade. Demand has naturally fallen off to some extent, as is usual at this season of the year, but there is some increase in the inquiry for Fall delivery. Stocks of all paints are limited, and raw materials continue to rule high. New features are lacking, prices show few changes and rule from steady to firm. The pig lead market is quiet, but prices are firm. White lead, dry and in oil, is in satisfactory seasonable demand, and offerings are light. Red lead is somewhat less active, and the foreign is quiet but steady. Demand for litharge continues excellent, with increased inquiry for Fall delivery, and all grades of orange mineral are in fair jobbing demand at full prices. Manufacturers of zinc oxide are still behind in their deliveries, and quotations are practically nominal. The consuming demand for dry colors is being supplied by deliveries on contract, and new business is limited. The hot weather restricts the consumption of mixed paints and colors in oil, but quotations remain steady. There is improved inquiry for barytes, china clay, etc., for Fall delivery, but otherwise the market would be rather quiet. Other paints and colors are featureless.

White Lead, Zinc, Etc.

WHITE LEAD.—As usual when the week is broken by holidays, trade slacks off, consequently the past week has been no exception. Corroders all report the first six months of the year as having been the best they have had for many years in the various lead products, all of which show a large increase. So far this month contract deliveries continue good, though they may expect to fall off from now on, as many of the grinders have shut down for their usual cleaning up around their factories and semi-annual stock taking. There have been further small sales of dry lead at 4¾c. for quick and 5c. for old process, usual terms. Dealers all report a satisfactory trade for the season in lead in oil for consumption, with stocks light of all grades. Foreign makes are rather quiet, but this arises more from light stocks in dealers' hands, as the arrivals have been light of late. Prices remain unchanged at 8½@8¾c. for the old established brands, and for others at 7½@7¾c., as to make, quantity and seller. The various corroders continue their previous price list, as follows: "We quote, subject to change without notice, above brands of white lead, dry or in oil, red lead and litharge in kegs: In lots of less than 500 lbs., 6½c.; in lots of 500 lbs. and over, 5¾c.; dry white lead in barrels, ½c. lb. less than price in kegs; red lead and litharge in barrels and half barrels, same price as kegs; white lead in 12½-lb. tin pails (packed in 100-lb. cases), 1c. per lb. over price in kegs; white lead in 25-lb. tin pails (packed in 100-lb. or 200-lb. cases), ½c. per lb. over price in kegs; white lead assorted in 1-lb., 2-lb. and 5-lb. cans (packed in 100-lb. cases), 1½c. per lb. over price in kegs. Terms: On lots of 500 lbs. and over, 60 days, or 2 per cent. discount for cash if paid in 15 days from date of invoice, f. o. b. New York. Quantities: To make either of above required quantities and assortment of packages either or all of the above articles may be counted. The above prices and terms supersede all previous prices and terms offered by this company."

RED LEAD.—There is still a scarcity of domestic for prompt delivery, but since the month opened trade has slacked off, and this may enable the corroders to accumulate stocks, as there has been a slight let-up in contract deliveries, as the weather has been too hot for outdoor work, and besides many dealers have been busy with their semi-annual stock-taking. Values remain firm at 5¾c. and upward as to the size of the order. Second hands, however, are shading this on a limited quantity. Foreign makes in first hands are in light stock, both here and on way. Small sales are being made for arrival at 8c. for extra and 7½@7¾c. for ordinary grades, as to quality and seller. English is quiet, but held steady at 7½@8c., as to grade and quantity.

LITHARGE.—Corroders report no falling off in deliveries to the rubber makers, though a slight one is noticeable with the glass industry, which has about closed down its factories for the summer vacation. There has been rather more inquiry for fall delivery and sales of several round lots are reported, both here and in the West, in addition to regular contract deliveries. Values remain firm at 5½c. and upward, as to the size of the order. There has been a slight improvement in the demand for English glass makers' grades for fall delivery at 7¾@8c., as to grade and quantity.

ORANGE MINERAL.—The usual jobbing demand incident to this period of the year is reported for French, and is satisfied at prices ranging from 10⅝@10¾c., as to quantity and seller. German is rather quiet at the moment. Small sales are reported for arrival and for fall delivery at 9@9½c., as to make and quantity. Second hands, however, are shading these figures for prompt delivery. English is jobbing fairly well at 9@9½c., as to make, quantity and seller. Domestic for prompt delivery is in limited stock, hence the bulk of the orders are for delivery as soon as possible. Prices remain steady at 7¾c. and upward, less usual discount terms.

PIG LEAD.—While trading has been light, prices have gradually been working to a stronger position. Several single car lots have been sold at 4.45@4.50c., closing with 4.50@4.55c. asked for spot and July. St. Louis market is also better, with sales of several hundred tons at 4.35@4.40c., as to quality. Late advices from there say "The light trade the past week can only be accounted for by the scarcity of offerings, for there was a good demand for all brands and buyers were willing to pay fair prices as compared with the market ruling at other points. The inward movement was somewhat larger, but it did not seem to increase the supply in the least, so that it was necessary to quote dull and firm markets all week. The range throughout the week was 4.35c. to 4.37½c., and 4.40c. paid for a couple of cars chemical on shipping orders, therefore the price did not represent the actual market. Right at the close a few cars sold at 4.36c.—kind not stated—and chemical could be quoted at 4.37½c. nominal. Receipts past week, 40,540 pigs, against 35,610 the week previous. Receipts since January 1, 793,744 pigs, against 959,027 the corresponding time last year. Shipments past week, 24,209 pigs, against 20,995 the week before. Shipments since January 1, 607,-151 pigs, against 643,865 the same time last year."

ZINCS.—The past six months have been the best that makers have had for many seasons. While many of the grinders have shut down to clean up their factories and stock-taking, no relief as yet has been afforded makers on this account, as they are still behind with their deliveries to both the home trade and for export. No change as yet has been made in prices by the New Jersey Zinc Co., who continue to quote 4½@5c., as to quality, usual terms. Florence is still scarce for prompt delivery and prices are firm at 7½@8c. for red and 8@8½c. for green seal, as to quantity. French is in good request, both for prompt and forward, at unchanged prices.

Dry Colors.

REDS.

VERMILION.—Further advances have been made in quicksilver, but the combination steadily adhere to their previous quotations for the vermilion. There is somewhat of a scarcity for prompt shipment, but, as demand has slightly fallen off, this scarcity will daily become less apparent. The combination quotations are 61c. for barrels or kegs, 62c. for bags and 66c. for broken lots. There is a good movement of English into consumption, but it is chiefly on contract delivery. We quote: 65c., for kegs and 66c. for bags. Chinese

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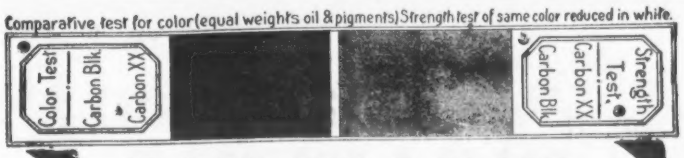

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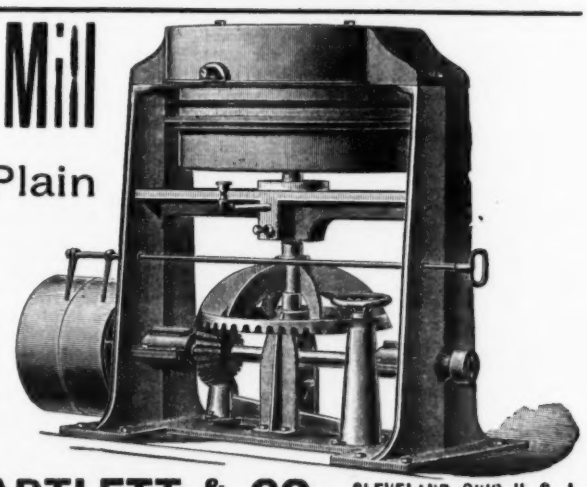

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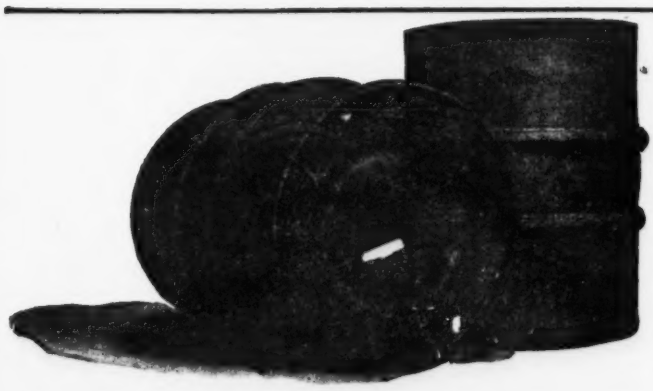

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Trade Mark. Trade Mark.

is steady and in ordinary request at 80@90c., as to quantity.

CARMINE.—The current wants of consumption are small and are filled by contract deliveries. Prices remain firm at $2.10@2.25 for bulk and $2.40@3.50 for smaller quantities.

VENETIAN RED.—Contract deliveries are larger and there is a good demand for prompt shipment. Stocks are low and dealers find difficulty in filling their orders. The foreign market is firm and tending upward, because of the good demand and the high cost of the raw materials. Quotations for English are firm at the last advance, and we quote 1½@2c. for first quality and 1¼@1¼c. for second quality. Domestic is firm at 60@90c., as to quantity and quality.

INDIAN RED.—There is a steady demand for Indian red and all the bright oxides, notwithstanding the advanced season. The cost of raw materials abroad is high and there is a scarcity of stocks for prompt shipment. Quotations are firm, but quotably unchanged.

BLACKS.

CARBON.—There is a good amount of new business doing and deliveries on contracts are keeping manufacturers busy. Prices are firm and we repeat our previous figures of 10@20c. for the higher grades and 6@10c. for the lower grades, as to quantity.

LAMPBLACK.—Manufacturers report an active market for all grades of blacks. Quotations remain unchanged, are firm and range 3@5c. for the low grades, 8@9c. for medium and 12@30c. and upward for the finer qualities.

BLUES.

PRUSSIAN.—There is a good amount of new business doing at full prices. Manufacturers are encouraged by the fact that dealers have not yet begun to replenish their stocks, and practically all deliveries go immediately into consumption. Contract deliveries continue large, and many manufacturers are behind in their deliveries. Prices are very firm, but show no change since our last review. Yellow prussiate of potash retains its firm position, and because of this fact it is expected that quotations for all blues made from yellow prussiate will eventually be advanced. We repeat our previous quotations of 28@30c. for chemically pure domestic and 30@32c. for the foreign make.

CHINESE.—Contract deliveries are large and there is a fair amount of new business doing, principally for immediate delivery. Prices continue firm and unchanged at 31@36c., as to quantity and quality.

SOLUBLE.—With the advance of the season new business shows a slight falling off, but the contract deliveries remain fairly heavy. Quotations are firm, by reason of the fact that prices have not been advanced in the same proportion as the cost of the base material. We quote 31@36c., as to quantity and quality.

ULTRAMARINE.—Demand continues good and prices are steady and unchanged.

BROWNS.

There is only a seasonable demand for umber and sienna, and we hear of no sales for forward delivery. Prices are unchanged and steady.

GREENS.

PARIS GREEN.—Deliveries on contract make up the bulk of the current business, few new sales being reported. There is a scarcity of goods in makers' hands, but, as the general opinion seems to be that the season in this section is about over, and that the Southern demand will be unusually small, there is a willingness to shade quotations of 12c. for round lots. Second hands have more liberal stocks, and offerings are freely made at 11c.

YELLOWS.

OCHER.—The arrivals have been large of late, but have gone immediately into consumption, leaving the spot offerings small. Demand shows a slight falling off, but prices remain steady and unchanged.

Miscellaneous.

BARYTES.—Consumption is somewhat less active, which has permitted dealers in the domestic to fully catch up with their deliveries. Prices, however, remain firm. Stocks of German in this market are limited, and the good demand in Europe restricts shipments to this country. Pricles are firm. We quote: Prime domestic, $18@20; second quality, $15.50@17; foreign, $19@20.

CHALK.—The imports of chalk have been unusually heavy during the past several weeks. This week they have amounted to 5,700 tons. There is a good demand, however, and no accumulation is feared. Quotations are unchanged and steady.

CHINA CLAY.—Bulk goods are still in short supply but, as there are several cargoes on the way or loading, no actual scarcity is looked for. Cask goods are in ample supply and in fair demand. Quotations are unchanged and steady and we quote: $15@17 for the finer kinds of imported, and $11@15 for medium and lower grades, as to quantity and quality. Domestic remains quiet, and prices are nominal at $8.50@10, as to quantity and quality.

COBALT OXIDE.—The movement into consumption is principally on contract. The demand at the present time is limited to small jobbing quantities. The combination quotation of $1.76 still prevails.

FULLER'S EARTH.—The market is quiet and supplies are ample. Prices, however, are fairly steady and we quote 75@80c. for lump and 75@90c. for powdered, as to quantity.

PUMICE.—Arrivals continue heavy but there seems to be no accumulation notwithstanding the fact that few large sales are reported. There is a steady demand for small quantities for prompt shipment at full prices. We quote: Original packages, 2@2½c.; selected lumps, 5@15c.; powdered in barrels, 1.85@2½c., as to quantity.

PUTTY.—Current wants of consumption are being filled by deliveries on contracts, and new business is limited. Quotations remain steady and unchanged and we quote 1.70c. for bulk, 2.20c. for bladders, and 2.25c. for one and five-pound tins.

TALC.—Demand continues active but no scarcity is expected because of the recent fairly heavy arrivals. Quotations are firm, but as yet unchanged, and we quote: French, 1.10@1¼c., and Italian, 1½@2c. There are no offerings of American talc in this market, and quotations are therefore nominal.

WHITING.—Manufacturers are kept busy in an effort to catch up with their deliveries. There is now an abundance of chalk in this market and manufacturers do not look for a repetition of the conditions of several weeks ago. There is a good amount of new business doing, principally for prompt delivery. Prices are firm at the combination figures, which follow: Commercial, 4½@5c.; gilders', 47@56c.; extra gilders', 57@64c.; American, Paris, 65@70c., and English cliffstone, 75c.@$1.20. These prices are for 50-bbl. lots. For larger quantities they can be shaded.

Mixed Paints.

The condition of the weather has a tendency to restrict painting operations, but the consumption this year is fully up to the average for previous seasons. Manufacturers ask and obtain full prices.

Colors in Oil.

There is a moderate consuming demand, which is keeping grinders fairly busy. Quotations are unchanged and steady. The strong position of dry colors naturally has a strengthening influence on the market for colors in oil.

Metallic Paint.

There is a good seasonable demand for both export and domestic consumption. Quotations are unchanged and steady. The proposed combination of the metallic paint manufacturers has not been effected as yet, but the promoters are still working to attain that end.

Varnish Gums.

The Star of the East has arrived from Auckland with 4,391 cases and 240 bags of kauri gum. Very little, if any, of this gum will be put upon the market, as it was practically all sold before arrival, and upon unloading will go immediately to the consumers. This will keep manufacturers supplied for some time to come, but as the next vessel—the Lake Erie—is not due to arrive until the latter part of October, holders of spot goods are somewhat firmer in their views, believing that there will be a good demand for spot goods before the next arrival. Advices from Auckland report that market as being in a firm position with higher prices probable. Manila copal is also in a firmer position. For some time past Singapore has ruled firm and relatively higher than New York, with the result that transactions have been chiefly in spot goods, which have been gradually reduced. If present conditions continue higher prices may be expected, as holders are already becoming firmer in their views. There is a fairly good business doing in Batavia damar at full prices. Zanzibar copal is scarce and prices are high and firm. All receipts are bought up immediately on arrival.

Glue.

The demand for glue continues large and is unusually good for this season of the year. Production is practically at a standstill, and stocks are daily being further reduced. It is particularly difficult to obtain the lower grades and we hear of no offerings under 10c. The higher grades are the more plentiful but, as the lower qualities become exhausted, prices will naturally advance. The proposed combination of the glue interests has not been effected as yet, and it is currently believed that the incorporation will not take place until early fall.

Glass.

WINDOW.—There continues a good demand for window glass and the amount of business done in June was much above the average for that month. Stocks in jobbers' hands are somewhat broken and they find it difficult to get a carload of well assorted glass from any one factory in the combination. This would seem to indicate that the amount of stock controlled by the American Glass Co. is much smaller than was generally estimated; or else, that the combine are holding the popular sizes for later in the season when higher prices will probably prevail. Quotations remain unchanged and firm at 80 and 20 per cent. discount for goods from warehouse and 85 per cent. discount for carload lots. A meeting of the wage committee of the glassworkers' association is scheduled for July 11 to decide upon the wage demands for the next fire. A meeting with the manufacturers will probably soon follow. The opinion is freely expressed that the manufacturers are as much in favor of an early start as the workers, but that they do not want to give the workers any encouragement by seeming at all anxious. There is only a small demand for French glass and prices remain very firm at 80 and 10 per cent. off the French list. Imports continue, but they are composed chiefly of goods which are coming forward on contract. There is an excellent demand abroad and prices are firm with the result that importers in this country find great difficulty in getting their orders filled.

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SINGLE.

Sizes.	1	2	3	4
6x8 to 10x15	$15 50	$14 50	$14 00	$13 50
11x14 to 16x24	13 50	17 75	16 75	16 00
13x22 to 20x30	24 25	23 00	21 25	20 00
15x36 to 24x30	26 50	24 50	22 00	....
26x28 to 24x36	28 75	26 75	24 00	....
26x34 to 30x40	32 25	30 50	27 00	....
32x38 to 30x50	38 25	36 50	32 75	....
30x52 to 30x54	39 75	37 50	33 75	....
30x56 to 34x56	41 50	39 00	36 00	....
34x58 to 34x60	43 50	42 00	39 00	....
36x60 to 40x60	47 50	44 25	42 00	....

DOUBLE.

Sizes.	1	2	3
6x8 to 10x15	$21 50	$20 50	$19 75
11x14 to 16x24	36 00	35 00	33 75
18x22 to 20x30	33 50	31 75	29 75
15x36 to 24x30	36 50	33 75	30 50
26x28 to 24x36	40 00	37 25	33 75
26x34 to 30x40	45 00	42 75	38 00
32x38 to 30x50	52 75	50 50	45 50
30x52 to 30x54	55 00	51 75	46 75
30x56 to 34x56	57 00	54 00	49 75
34x58 to 34x60	59 50	57 50	53 50
36x60 to 40x60	64 50	60 50	57 50

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All sizes over 52 inches in length, and not making more than 81 united inches, will be charged in the 84 inches.

Discount, 80 and 10 per cent.

PLATE.—Demand continues active and prices remain firm at 75 and 15 per cent. discount for goods from warehouse and 80 per cent. for carload lots. New features are lacking.

Zinc Production in 1898.

In common with the miners and smelters of all the other useful metals, the producers of zinc in 1898 had an active and prosperous year. The demand for the metal was large, and there was an increase in output, which did not quite meet that in consumption. In previous years there has been talk of agreements to restrict production and limit the quantity of metal to be put on the market, but in 1898 there was no need of any convention of this kind, since supplies were absorbed as fast as furnished.

According to the revised figures of production, as collected for "The Mineral Industry," Volume VII., the output of spelter or metallic zinc in the United States in 1898 was as follows, in short tons of 2,000 pounds.

ZINC PRODUCTION IN THE UNITED STATES, IN SHORT TONS.

	1897. Tons.	%	1898. Tons.	%	Changes. Tons.
Eastern & Southern Illinois & Indiana	9,900	9.8	7,805	6.8	D. 2,095
Missouri	38,680	38.6	46,693	41.0	I. 8,013
Kansas	18,412	18.3	21,063	18.4	I. 2,651
	33,395	33.3	38,543	33.8	I. 5,148
Totals, short tons	100,387	100.0	114,104	100.0	I. 13,717
Tots., metric tons	91,071	....	103,515	....	I. 12,444

The Eastern and Southern producers were the only ones showing a decrease, and this falling off was chiefly in the Southern mines. The Illinois and Indiana smelters had the largest proportional increase, 17.1 per cent., while the Missouri producers gained 12.9 per cent., and those of Kansas 13.2 per cent. The Missouri and Kansas smelters, who draw their ores from what is known generally as the Joplin region, made in 1898 in all 52.2 per cent. of the spelter produced in the country, against 51.6 per cent. in 1897. This region is actively growing and will probably again increase its proportion during the current year.

In addition to the spelter above reported, there was a production of zinc white, or zinc oxide, direct from the ore—chiefly in the East—amounting to 32,747 short tons. This compares with 26,262 tons in 1897, showing an increase of 6,485 tons, or 24.9 per cent.

The spelter production of the world for two years past is given in the table below, in metric tons, the world's measure. The figures for 1897 are from "The Mineral Industry," Volume VI. Those for 1898 are from Volune VII. of the same work, some of the statements for foreign countries being due to the valuable circular of Messrs. Henry R. Merton & Co., of London:

WORLD'S PRODUCTION OF ZINC, IN METRIC TONS.

	1899. Tons.	%	1898. Tons.	%
Rhine, Belgium and Holland	187,406	42.0	191,836	40.8
Silisia	95,550	21.4	99,233	21.3
France and Spain	32,634	7.3	32,649	7.0
Great Britain	23,805	5.4	27,635	5.9
Austria	9,332	2.1	7,229	1.6
Russia	5,852	1.4	5,664	1.3
Total outside of U. S.	354,579	79.6	364,246	78.9
United States	91,071	20.4	103,515	22.1
Total	445,650	100.0	467,761	100.0

The total production outside of the United States shows an increase of only 9,667 tons, or 3 per cent. The United States output, however, shows a much

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The "*Master Painter*," June, 1899, Page 3.

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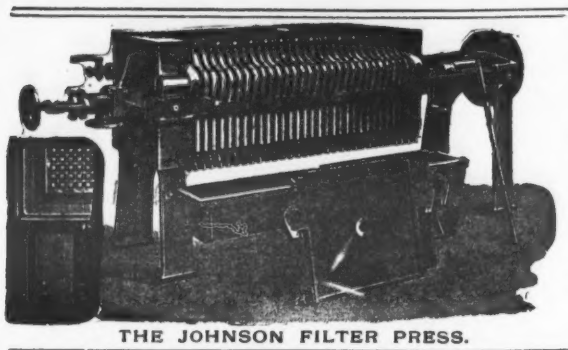

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higher proportion of gain—12,444 tons, or 13.7 per cent., so that the total increase reported was 22,111 tons, or 4.9 per cent. This gain was—outside of the United States—somewhat unevenly distributed. In France and Spain and in Poland there was no appreciable change, while in Austria there was a decrease of 2,103 tons, or 22 per cent. Great Britain increased its output by 3,830 tons, or 16 per cent. The two chief producing groups—the Rhine, Belgium and Holland and Silesia—show advances of 2.3 and 4.1 per cent., respectively. It will be seen that the increase in production in the United States was greater than that reported for all the European producers.

The increase in the supply of spelter was, as noted above, hardly equal to that in demand, and a steady rise in prices was the result. At opening of 1898 good ordinary brands sold at $89.60 in New York and £18 1s. 3d. in London per long ton. At the beginning of 1899 the quotations were $117.60 and £24 15s. respectively. Since the first of the year there has been a still further rise. This increase has been due entirely to demand, as little or no speculative element entered into the market.

The United States furnished a considerable quantity of spelter to the European market, the exports in 1898 amounting to 9,374 short tons of metal and 10,520 tons of ore, the latter being equivalent to about 6,300 tons of metal. —Engineer and Mining Journal.

(Special Correspondence to the Reporter.)

Production of Manganese in 1898

Washington, July 7, 1899.

The annual report of the United States Geological Survey upon the production of manganese ores in 1898 has been completed, and through the courtesy of the director the correspondent of the Reporter is enabled to present the following advance abstract:

In addition to their use in steel manufacture manganese ores are employed as oxidizers in the manufacture of chlorine and bromine; as decolorizers of glass, and also for coloring it; as dryers in varnishes and paints; in Leclanche batteries; in the preparation of oxygen and in the manufacture of disinfectants such as manganates and permanganates. They are also used as coloring material in calico, printing and dyeing, coloring glass, pottery and brick and in green and violet paints. Some varieties are also utilized in medicine and in chemical laboratories.

Usually an increased demand for manganese is made by increased imports of ore, the home production also augmenting, but not in proportion to that of the foreign ores imported. The war with Spain, however, had the effect of diminishing importations and the home production in the year 1898 amounted to 19,957 long tons, valued at $129,185, or $6.09 per ton. This was an increase of 4,849 long tons, or 43.7 per cent. over the 1897 output of 11,108 tons. It is the largest production of manganese ore reported since the year 1891.

Six States contributed to the total as compared with seven in 1897. The States of Michigan and Pennsylvania in 1898 do not appear in the list as producers of manganese ore, although they both mined manganiferous iron ores, but Alabama supplied a trial shipment, the first for a number of years. Georgia heads the list of States with a total of 6,639 long tons, followed by Virginia and Arkansas.

Notwithstanding the great variety of mineral resources of the United States the domestic manganese mines now developed are unable to support the demand, for most of the known deposits in this country are unreliable as to extent or undesirable in composition with the ores. The decreased price paid for manganese ore which is below the limit set by the steel works, especially as regards the phosphorus contents, materially influence the exploitation of some deposits.

The production and value at the mines of manganese ores by States in 1898 and 1897 are as follows: Alabama, 1898, 22 tons, valued at $143; 1897, none; Arkansas, 1898, 2,866 tons, valued at $26,035; 1897, 3,240 tons, valued at $33,708; California, 1898, 541 tons, valued at $3,222; 1897, 484 tons, valued at $2,888; Georgia, 1898, 6,689 tons, valued at $41,571; 1897, 3,332 tons, valued at $22,084; Michigan, 1898, none; 1897, 37 tons, valued at $370; Pennsylvania, none; 1897, 354 tons, valued at $2,032; Tennessee, 1898, 381 tons, valued at $2,276; 1897, 11 tons, valued at $93; Virginia, 1898, 5,662 tons, valued at $55,938; 1897, 3,650 tons, valued at $33,630; total, 1898, 15,957 tons, valued at $129,185; 1897, 11,108 tons, valued at $95,505.

In the past two years since 1897 there has been a continued increase in production, but a decline in average value at the mines. The record that in nineteen years the United States has supplied a total of less than 300,000 tons of what may be properly classed as manganese ores and that the greatest annual production was below 35,000 tons may be disappointing to some who have pessimistic ideas of the magnitude of the domestic mining industry of manganese ores.

MANGANIFEROUS ZINC RESIDUUM.

In the northern part of New Jersey large quantities of zinc ores are mined, and in the smelting of these ores considerable amounts of zinc residuum (a clinker carrying iron and manganese) and some zinc are obtained. This residuum is utilized in the manufacture of spiegeleisen, and the yearly production and value during the past three years are as follows: 1896, 44,953 tons, value, $20,455; 1897, 33,924 tons, value, $18,713; 1898, 48,502 tons, value, $26,676.

PRODUCTION OF MANGANESE IN VARIOUS STATES.

Alabama.—This State produced a small amount of manganese in 1898, but the shipment of 22 tons is to be considered as a trial rather than the result of regular exploitation.

Arkansas.—Manganese ores occur in two sections of Arkansas. The producing region known as the Batesville district lies in the northern central portion of the State, principally in independence and Izard counties. The other district which is not at present exploited is in the southwestern part of the State, and is claimed to extend from Pulaski County into Polk County on the west. Two principal varieties of manganese occur in the Batesville region, viz., massive psilomelame; the other crystalline, mostly braunite. There are also gradations between the two and small quantities of pyrolusite and wad are also found. The better class of Batesville ore contains 50 per cent of manganese, and the low grades run from 40 per cent. down to and in some cases less than 25 per cent. of manganese. The ores mined are principally used in the manufacture of ferro-manganese and spiegeleisen.

California.—Although manganese ores are reported as occurring in seven counties in this State, the deposits in Alameda County only are active and the total output since 1874 has reached an aggregate of about 9,656 tons.

Colorado.—The greater portion, and, in some years, the entire amount of these ores produced, come from the Lakeville district in Lake County, being obtained in mining silver ores. As these are mined in connection with the silver operations and they constantly vary in the amounts of manganese carried, no attempt has been made in later reports to separate the ores yielding 20 per cent. or over of manganese from those having a lower content of this ingredient.

Georgia.—This State supplied 6,689 tons in 1898, slightly more than doubling the 1897 output of manganese ores. This is due to increased exploitation in the Cartersville region.

Pennsylvania.—This State did not produce any true manganese ore in 1898, but 100 tons of manganiferous iron ore carrying 25 per cent. of manganese was mined.

Tennessee.—This State has been an intermittent producer and in the year 1898 contributed 381 tons of manganese ore to the total for the United States. The mine which contributed most of this class of ore has, however, been abandoned.

Virginia.—This State was for years the principal producer of manganese ore in the United States, but after the practical exhaustion of the Crimora mine it fell to second place. In the years 1897 and 1898 there was considerable active exploitation and the production was augmented, the amount contributed in 1898 reaching 5,662 long tons. Being nearer the points of consumption the ore now represents augmented value, the average price at the mine being $9.88 per ton.

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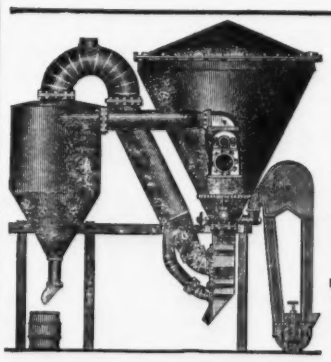

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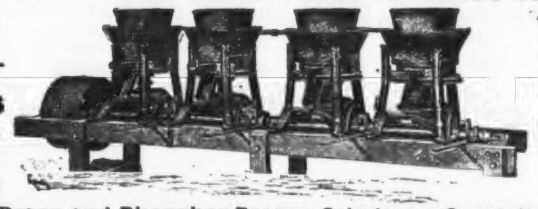

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Engineer Bay State Gas Co.,
Boston, Mass.

pendent on foreign supplies for the greater portion of manganese ores consumed. The total amount imported during 1898 was 114,885 long tons, valued at $831,967, or $7.24 per ton, a falling off from the previous year of 5,076 tons or 4.23 per cent. The principal contributor was Russia which supplied over 40 per cent. of the total, followed by Brazil, Turkey in Europe and Chile. The high value placed on the ores from Germany, Scotland and Nova Scotia is probably due to other chemical constituents than manganese. It appears in the past decade the United States had produced one-fifth of the manganese ores consumed and that in 1898 the proportion of domestic ores was one-eighth of the total apparent consumption.

(Special Correspondence to the Reporter.)

Appraisements.

Washington, July 7, 1899.

The Attorney General has rendered an opinion of importance to a large number of importers, and which will have a bearing upon numerous cases pending in various ports throughout the country. The Attorney General holds that the government has no ground for basing an appeal from the decision of the United States Circuit Court to the effect that an appraisement duly made by an appraiser whereof notification has been sent to the importer, cannot be recalled by the appraiser for the purpose or amendment unless clerical error is clearly established.

The case under review covered two entries of merchandise subject to an ad valorem duty, and which was appraised at 9s. 6d. per hundred weight. On the same day the appraiser recalled the entries for the purpose of correcting the appraisement, it appearing that it had been the intention to appraise the merchandise at 9s. 9d. per hundred weight, but that through some oversight the report to the collector stated the appraisement at 9s. 6d. It appears that the appraiser had duly notified the importers of his appraisement at 9s. 6d., and had also subsequently advised them of his recall of the entries and the correction of the appraisement to read 9s. 9d. The importers protested, claiming that such action of the appraiser was illegal, and that the original appraisement at 9s. 6d. was correct and could not be reviewed other than upon reappraisement proceedings had under section 13 of the act of June 10, 1890. The Board sustained this view of the case, and on appeal to the United States Circuit Court for the Southern District of New York, that court sustained the decision of the Board, holding that there was no clerical error on the part of the appraiser, and that the appraisement at 9s. 6d. of which the importers were duly notified was the legal appraisement in the case.

After reviewing the record the Attorney General has decided that the evidence in the case does not clearly show that a clerical error had been committed on the part of the appraiser in making his original return, and he therefore advises the Department that no further proceedings will be directed. Acting on this advice, the Collector at New York has been instructed to prepare the papers for a refund of the excessive duty exacted. Customs officials will be instructed to follow the ruling of the court on all clear cases, but as it must always be a question of fact to be demonstrated by the peculiar circumstances of each case as to whether a clerical error was involved or not, the government will be given the benefit of any doubt that may exist. This decision, it is understood, will have a bearing upon all cases of appraisements in which the period within which a reappraisement can be called for has elapsed, and in which the government cannot show a clerical error.

Benzole and Tetrachloride of Carbon

W. Zanker in the Leipzig Farber Zeitung says that it is a good sign that attempts have been made to replace benzole in chemical washing by liquids which entail less danger of fire. At present the ideal of chemical washing free from all risk of conflagration has not been reached, but considerable progress has been made in that desirable direction. Benzole keeps its place, in spite of the fact that substitutes have been proposed which, while good solvents for fats, resins, varnishes, etc., and therefore good cleaning materials, are less combustible than it, by virtue of its superiority to them in cheapness. Many experts think that tetrachloride of carbon has the best chance of supplanting benzole, and a few optimists think that we are within a little of seeing it do so entirely. All that is necessary, they think, is to produce it at the same price as benzole. However that may be, the tetrachloride is at present about four times the price of benzole. Another point to be considered is that carbon chloride is about 2½ times as heavy as benzole volume for volume. Now, these liquids, although bought by weights, are used in chemical washing by volume, and not by weight. The washing machine must be filled as full of the tetrachloride as of benzole. In drying articles washed with tetrachloride we find another disadvantage of its use. Some of the cleansing fluid has to be lost in that process, no matter how thoroughly it has been wrung. Now, the volume lost is practically the same both for benzole and for tetrachloride of carbon, but the loss of the latter costs 2½ times as much as the loss of the former. The following experiment was made to determine the loss: A cloth, weighing 40 oz. was soaked first with benzole, then with the tetrachloride, thoroughly wrung and then weighed immediately. It retained, after wringing, 40 oz. of benzole in the one case and 95 oz. of tetrachloride in the other. This confirms the theory that the same volume of each liquid is retained.

It is true that the tetrachloride suffers less loss by evaporation during the washing than the benzole, as it has a higher boiling point than the latter—in fact, just about half as much per cent.

It would thus seem that before the tetrachloride can fully replace benzole it must not merely be as cheap, but much cheaper, probably not more than half the price of the hydrocarbon. It need not be hoped that the danger of fire will overcome the consideration of £ s. d. The hope lies in the discovery of new processes for the manufacture of tetrachloride of carbon, especially one for making it direct from its elements.

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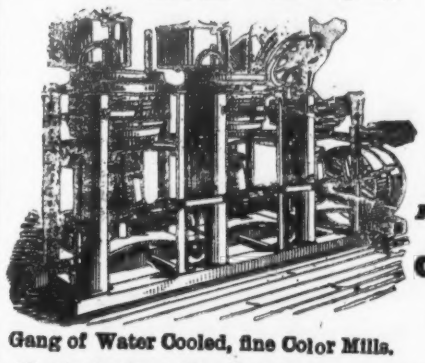

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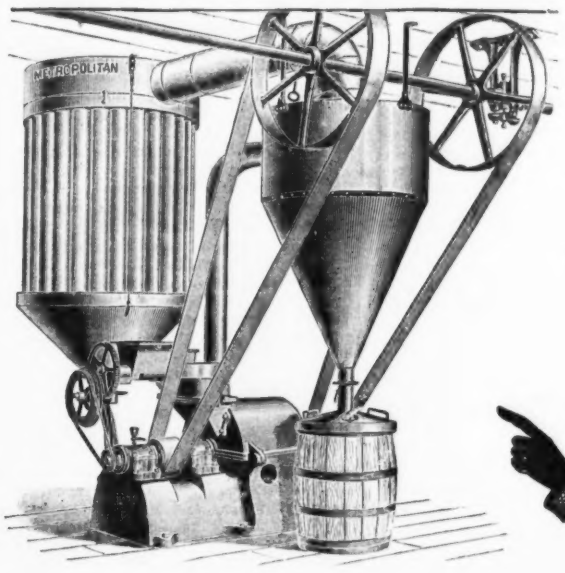

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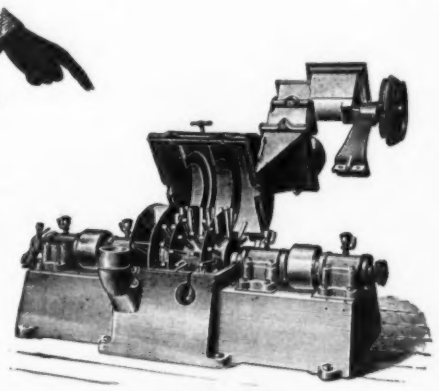

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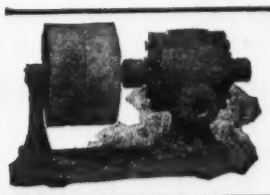
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OIL MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 35.

Saturday Evening, July 8, 1899.

Vegetable Oils.

LINSEED.—Since the month opened there has been an unusually good consuming demand for spot goods, thus confirming what we said some weeks ago that the indications were that July would prove to be an unusually active month for oil. Prices remain steady at 36@37c. for Western and State oil and 39@40c. for city. Buyers are not inclined to take hold for forward deliveries. Neither are sellers anxious to sell until they know more about the seed situation. In their circular, under date of July 5, Messrs. Ira A. Kip & Co. say: Imported into United States from January 1 to date, Calcutta, bags, 1899, 6,825; 1898, 18,650; Europe, bags, 1899, 8,805; 1898, 18,356; South America, bags, 1899, none; 1898, none. Imported into United States past month, bags, 1899, 6,825; 1898, 5,000. On the way for the United States, by mail, to May 18, Calcutta, bags, 1899, none; 1898, none. On the way for the United States, by cable, to June 30, Calcutta, bags, 1899, none; 1898, none. Stock in importers' and speculators' hands in Boston June 30, Calcutta, bags, 1899, none; 1898, none. Stock in importers' and speculators' hands in New York June 30, Calcutta, bags, 1899, none; 1898, none. Visible supply, bags, 1899, none; 1898, none. Stock on hand January 1, all hands, bags, 1899, none; 1898, none. Deliveries since January 1, New York and Boston, bags, 1899, 15,630; 1898, 37,006. Deliveries past 30 days, bags, 1899, 6,825; 1898, 5,000. Consumption for years, bags, 1899, ..; 1898, 49,289. Linseed, 19,295 bags of Argentine seed arrived at this port in transit to Canada not included in our imports. Flaxseed has ranged in Chicago during the month from $1.00½ to $1.08 for No. 1, closing at $1.02.

COTTONSEED, CRUDE. — There have been additional sales to those reported in our last of new Texas crude for September and October delivery, mostly to Western packers and refiners, at 15@16c. loose, f. o. b. mills, the sales aggregating several thousand barrels. Most of the mills, however, are holding for 18c., though they are open to conviction. The few stray lots of old crude which comes to this market find buyers at 20½@21c., according to quality. The sales comprise 200 bbls. at 20½c., 115 bbls. do. at 21c. and 6 tanks Atlantic at 16@17c., loose, as to quality.

REFINED.—While there has been no change in quotations during the past week, the market has in many other respects given further indications of its advancing tendency. The purchases at the prices recently established have been on a more liberal scale, and to the trade it has become apparent that supplies are narrowing down to a volume which may mean a great scramble for oil before the new season's supply reaches the markets. Not only have stocks at the ports of Southern Europe been very much depleted in the face of a continued high rate of consumption, but in this country, too, the large and increasing demand for compound lard is rapidly reducing supplies on every hand. It is only natural that trade should ease up after the large sales reported in a previous issue, they aggregating about 3,000 barrels on this side and from 10,000 to 15,000 barrels of resales abroad of stocks purchased some months ago at low prices. The lull which appears in the market is more on account of the advance in ocean freights than any falling off in the demand. Marseilles is quoted at 3s. 6d. for July and 4s. for August, with only a limited amount of freight room available for July. Texas mills, notwithstanding the recent floods, are offering new crop summer yellow for November, January and December shipment to the various French ports at a slight concession under current figures. There has been a good demand for winter yellow for export at 30@31c. Packers and refiners in this section are still in the market, and are freely bidding 25@25¼c. for a good off yellow and 24½@25c., loose, for a prime grade of yellow for prompt delivery, but the trouble is to pick up any round lots, except at such figures as the chief holder may feel inclined to name. On another page of this issue we publish the only authentic report given out of the formation of the English Oil Company combination at London. We want to call the attention of our readers, especially those interested in the cotton oil products, to the meeting of the Interstate Cottonseed Crushers' Association, to be held at Memphis on July 26 and 27. Matters of grave importance to the cotton oil industry will be discussed, and papers prepared by various persons well qualified to speak for the industry will be read. None should fail to be present. In our next issue will give the programme in full. The market closes steady at 26½@27c. for prime yellow, 25½@26c. for off yellow; winter yellow 30@31c. and white oil 30@31c. The sales in addition to those mentioned above comprise 1,200 bbls. prime yellow at 26¾c., 800 bbls. choice yellow at 27c., 500 bbls. do. at 27½c., 3,000 bbls. off yellow at 25½c., 2,600 bbls. of prime yellow at 26½@26¾c., 1,600 bbls. winter yellow at 30c., and 100 bbls. white oil at 30c.

EXPORTS OF COTTONSEED OIL FROM NEW YORK, BY COUNTRIES, IN GALLONS.

	For week ending July 6, 1899.	Since Sept. 1, 1898.	Same time last year.
Africa, Algiers	....	849,961	504,558
Egypt	....	27,600	28,350
Sierra Leone	....	2,651	....
South	....	4,221	2,807
Tunis	....	....	2,500
Argentine Republic	2,560	88,592	18,005
Australia & N. Z.	....	185,620	71,167
Austria	....	2,879,937	2,917,719
Belgium	....	132,763	122,062
Brazil	24,612	786,539	808,255
Br. East India	....	300	....
British Guiana	....	87,923	75,497
British W. Indies	2,356	250,618	283,792
Central America	....	3,272	1,630
Chili	....	6,679	7,994
Cuba	....	101,174	9,774
Danish W. Indies	....	7,045	14,811
Denmark	16,371	97,851	54,768
Dutch Guiana	....	203	311
Dutch West Indies	....	20	129
Ecuador	....	....	5,066
England	16,410	1,413,803	953,384
France	45,115	6,426,406	7,701,000
French Guiana	....	5,037	967
French W. Indies	504	406,890	392,846
Germany	....	348,383	602,627
Gibraltar, f. o.	....	168,532	....
Hayti	....	3,862	....
Ireland	....	5,000	....
Italy	2,700	1,506,793	2,293,386
Japan	....	500	500
Malta	....	8,750	48,952
Mexico	50	40,854	50,297
Netherlands	61,500	893,428	931,821
Newfoundland	....	29,506	28,700
Nova Scotia	....	422	162
Norway & Sweden	....	51,350	7,500
Peru	....	1,203	300
Porto Rico	150	3,732	....
San Domingo	....	67,334	66,743
Scotland	....	219,761	208,056
Spain	....	50,850	....
U. S. Colombia	130	23,067	15,104
Uruguay	2,877	183,903	189,450
Venezuela	....	1,173	923
Totals	175,335	17,715,889	18,374,961

EXPORTS OF COTTONSEED OIL FROM NEW ORLEANS, BY COUNTRIES, IN GALLONS.

	For week ending July 6, 1899.	Since Sept. 1, 1898.	Same time last year.
Austria	....	1,093,900	1,388,550
Belgium	....	849,000	76,000
Central America	....	500	500
Cuba	....	11,900	....
Denmark	27,500	326,300	190,000

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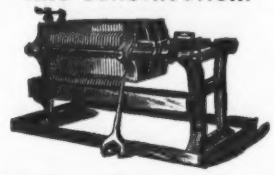

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England	....	1,482,550	782,550
France	5,000	6,115,000	3,348,300
Germany	....	427,500	333,500
Ireland	....	101,250	56,250
Italy	....	457,950	12,500
Netherlands	....	2,684,600	1,349,750
Scotland	....	124,000	....
U. S. Colombia	....	500	....
Totals	325,000	14,012,950	7,538,400

EXPORTS OF COTTONSEED OIL FROM BALTIMORE, BY COUNTRIES, IN GALLONS.

	For week ending July 6, 1899.	Since Sept. 1, 1898.	Same time last year.
Belgium	....	330,450	340,250
Brazil	....	2,500	....
Br. West Indies	....	5,000	....
England	....	405,750	70,500
France	....	153,000	12,000
Germany	....	625,550	398,697
Ireland	....	2,950	26,000
Netherlands	....	615,900	343,010
Scotland	....	173,500	130,600
U. S. Colombia	....	20	....
Totals	....	2,324,670	1,321,057

EXPORTS OF COTTONSEED OIL FROM GALVESTON, BY COUNTRIES, IN GALLONS.

	For week ending July 6, 1899.	Since Sept. 1, 1898.	Same time last year.
Austria	....	....	195,000
Belgium	....	48,700	67,699
Denmark	....	176,767	2,500
England	....	287,500	48,400
France	....	1,815,101	3,077,159
Germany	....	3,08,850	523,051
Italy	....	12,750	10,000
Mexico	....	937,413	546,307
Netherlands	....	2,387,222	1,887,400
Totals	....	5,944,303	5,977,915

Cocoanut Oils, Etc.

CEYLON.—Trade has been rather slow the past week. This, however, is not unusual, when holidays intervene. Small jobbing sales are reported on the spot at 5⅝@5¾c., and from vessel due at 5½c., about 100 tons being taken within the range. Cuban has also been in better request, with sales of 600 bbls. reported at 5⅛@5 3-16c. Now asking 5¼c.

COCHIN.—The market is quiet but firm for spot goods at 7@7¼c., as to packing and seller. From steamer due 50 tons were sold early in the week on private terms, and later about 75 tons in jobbing orders at 6½c. Shipments July-September are quoted at 6@6⅛c., as to quantity and seller.

CORN.—There has been a good export demand, with sales reported of 20 cars at 3.40c. At the close the mills advanced their price and were asking 3.50c. for late July and August delivery, with 3.45c. bid. For jobbing store parcels they are asking 3.75c. and upward, as to the size of the order.

OLIVE.—The market remains steady at 52½c. for spot and 51½c. for arrival for a fair grade of Malaga oil. Choice grades of yellow are quoted at 58c., and green, 52½@57½c., according to quality, with sales thereat. Olive foots are quoted at 4@4½c. for a choice green quality, and same price for a guaranteed quality for arrival. Almost no demand for low grades, and prices are nominal at 3¾c.

Animal and Fish Oils.

COD.—There is no business reported from first hands and jobbers report a light movement. Prices are barely steady at 33@35c. for domestic and 38@40c. for Newfoundland.

DEGRAS. — The situation has not changed. The demand is light and the offerings not urgent, owing to the firmness in the primary markets. We quote German at 2½@2¾c. and English at 2⅝@3c., as to quality.

LARD.—the market has been without features of interest, largely due to the broken week, although business has been exceptionally good, pressers and dealers reporting an active demand for prime oil, both for home use and export. The variations in the market for lard have not been of sufficient extent to affect the oil, but the market is sensitive and an advance in lard would be promptly followed by a corresponding advance in oil. The lower grades have been in moderate request and rule steady.

MENHADEN.—Reports from the fishing fleets indicate an abundance of fish all along the coast, although no report of operations along the coast of Maine has been received here, and it is believed that the fish have not appeared there in large numbers. Considerable oil has been made and the offers of both Northern and Southern have been free, the former at 24c. and the latter at 20c., while some could be secured at 23c. and 19c. respectively. There is, however, at present no outlet, dealers having ample supplies. Reports from the Gulf of Mexico are to the effect that the fish are abundant and considerable oil is being made, and this is confirmed by the statement from Port Arthur that the manager of the works there is purchasing empty petroleum barrels in large quantities and is sending to other places for additional lots. The demand for pressed oils is light and prices are unchanged.

NEATSFOOT.—The demand is rather light, as is usual at this season of the year. Prices are unchanged.

RED.—Manufacturers of saponified report an increased demand, there being now a steady call for current requirements of consumers, which are apparently larger. Prices are steady at 4⅛@4¼c. for city and 4@4½c. for Western. Elaine is in good request and is unchanged at 28@30c., as to quantity.

WHALE AND SPERM.—No sales of crude are reported from New Bedford, where the situation remains unchanged. Bleached is quiet and unchanged.

Mineral Oils.

BLACK.—There is a continued active demand for summer, with the price firm at 6¾@7¼c. The offerings of low grade continue, with sales claimed for export.

CYLINDER STOCKS.—The demand has been active for nearly all grades though the preference continues for filtered. Prices are firm at the recent advance.

NEUTRAL.—The demand continues satisfactory, the requirements being larger than usual. Prices are firm.

PARAFFINE. — The active demand heretofore noted for all grades continues. Prices are firm at the recent advance.

SPINDLE.—There is a steady, moderately active demand for current consumptive requirements. Prices are firm on all grades.

Oil Cake Meal.

No change in the situation since our last review of the market. Exporters only bid $24, while crushers are holding for $24.25@24.50 per ton. The advance in ocean freights prevents what otherwise would be a large business. Until they decline or exporters come up in their bids things will remain as they are for the present.

Exports of Flaxseed from New York.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1898.
Belgium	....	86,580
England	....	257,235
Germany	....	151,026
Netherlands	....	1,077,048
Sweden	....	67,525
Totals	....	1,639,373

Exports of Flaxseed from Philadelphia.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1898.
Netherlands	....	105,342

Exports of Flaxseed from Baltimore.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1898.
England	....	1,365
Ireland	....	1,205
Totals	....	2,570

Wax, Lard, Tallow, Etc.

PARAFFINE WAX. — The export movement during the past week has

The Freedom Oil Works Co.
INDEPENDENT REFINERS,
Neutrals, Red Oils, Steam Refined Cylinder Stocks,
Paraffine Wax and Water White Illuminating Oil.
FREEDOM, PENNA., U. S. A.

SCOFIELD, SHURMER & TEAGLE
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To PLANTERS and GINNERS:
Have you completed arrangements to instal a LOWRY PRESS this season?
If not, apply to the *Texas Planters Company,* Dallas, Texas for all Texas points; to the *Tennessee Planters Company,* Memphis, Tennessee, for points in Louisiana, Mississippi, Tennessee, Arkansas, Indian Territory, and Oklahoma; to the Georgia & Carolina Planters Company, Augusta, Georgia, for points in North and *South Carolina, Georgia.* Alabama and Florida.
THE PLANTERS COMPRESS COMPANY, No. 89 State Street, BOSTON, Mass.,
has commenced shipments of these presses for this season's use, and there is going to be a large demand for cotton in *LOWRY* bale form.

shown little increase, having amounted to about 1,900,000 lbs. There is still no wax offering, as most pressers have their production under contract. For 124@126 m. p. 4¼@4½c. is quoted, but there is none offering from outside hands at 4¼c. The demand for home consumption continues large. The principal holders quote crude at 4½c. for 117 m. p., and 4c. for 124@126 m. p. We quote: Refined at 5¼c. for 120 m. p., 5½c. for 125 m. p., 6c. for 130 m. p., and 6½c. for 135 m. p. For 140 m. p. 10½@11½c. is asked.

TALLOW.—The market has been a quiet one during the week. Melters, having sold well up for this month, have not been anxious sellers, and while they are asking 4⅜c. for city, they are open to conviction. London sales were 3d. off, and out of 700 casks offered only one-quarter was sold. At the close 4¼c. was best bid for export. Mr. H. W. Calef, in his circular, under date of July 6, says: "Following my latest issue there was a week of extreme dullness, city hhds. dropping to 4 3-16c. This caused freer buying and a recovery to 4⅜c. for hhds., with heavy sales of tcs. at 4½@4⅝c. for city. Since then, partly on account of holidays, partly on account of the excessive heat, and partly because of a material reduction in foreign demand—not offset by any improvement in local business in this part of the country—there has been a further weakening of tone, leaving values unsettled in the absence of important transactions. Wednesday's London sales showed a decline of 3d., with small sales; not surprising, in view of the heavier shipments from Australasia; about 5,250 tons during June. Yet, especially for the South of Europe, for hard bodied stock the demand has rather exceeded the supply; sales chiefly at 4⅝@4¾c. f. o. b. this port. Country parcels, if unsuitable for exportation, have brought irregular and generally low rates, the inferior being comparatively neglected. Edible touched 4⅝c., while one special make sold as high as 5⅛c. A nominal quotation as to brand, etc., would be 4¾@5c. to-day, and for city in hhds. 4 5-16c. Heavier supplies of the latter might lead to important business, the available local production being small until late contracts shall have been filled. The June clearances from this port were 4,508,300 lbs. of tallow and 4,146,000 lbs. of grease.

GREASES.—There is no change in the situation, except there is not an over stock offering either for prompt or forward. Prices remain steady for brown, common to choice, at 2¼@3¼c., and yellow at 3½@3⅝c. There has been a good demand for oleo stearine, 1,000,000 lbs. being taken in the West at 6c.; now asking 6⅛@6¼c. for further lots. In his circular, Mr. H. W. Calef says: "Pressers have bought fair quantities of grease, and for the grades they require prices remain substantially as they were. Manufacturers have bought low grade to handsome house and bone greases at 3½@4c., closing at 3⅝@3⅞c. for medium to standard qualities. Exporters have bought like grades at 3½@4c. f. o. b. Of grease stearine, supplies have been too small to permit of any reduction in price. Last month's rates still apply. Prime lard stearine is quotable at 6¼@6⅜c., and oleo stearine at 6c., at which there were sales here and in Chicago, mainly for local use."

British Oil Seeds Trust.

When John R. Bartlett came to England five months ago the managers of the linseed and cottonseed crushing mills and refineries were competing sharply with one another and adopting no measures for self-preservation. He has drawn 60 per cent. of this great trade into an amalgamated company His plan of operations has been adopted by a majority of the trade, including all the strongest companies and firms. He has made contracts with seventeen corporations and firms, and purchased twenty-eight mills and twelve oil refineries, with plant, business and goodwill.

The British Oil and Cake Mills, limited, has been organized to carry into effect the series of agreements made by him and his brokers and to conduct the business for the common advantage of the majority of the trade. The share capital is as follows:

Preferred	£750,000
Ordinary	750,000
Debenture stock	750,000
	£2,250,000

RECENT ISSUE IS:

4¼ per cent. debentures	£550,000
5½ per cent. preference	600,000
Ordinary	600,000
	£1,750,000

The British Oil and Cake Mills, limited, is an exact reproduction of similar amalgamations in America, with the single difference in detail that the stock is not watered. There has been no overcapitalization, the good-will of each business having been purchased on a hard cash basis of actual dividend-earning capacity.

The strongest companies in London, Hull, Liverpool, Glasgow, Gloucester and other centers of the linseed industry have sold out their business and property to the consolidated company, of which Hugh Colin Smith and the chief managers of the mills and refineries are the directors. The business will be managed for the common benefit by the combined practical knowledge of the directors. Mr. Bartlett will probably be vice-chairman of the new company. Lord Wantage and Reginald Abel Smith are trustees for the debentures stockholders.

The new company is neither a trust nor a monopoly, but simply one of many industrial amalgamations which are formed here as readily as in America. English law sanctions such consolidations, and they receive the support of the greatest financiers, and there is no popular agitation against them. The promoters of the reorganization of the oilseed trade have been influenced by the increasing severity of competition in the purchase of supplies and the distribution of products, and have taken concerted action to secure what they consider a fair trading profit. The consolidated company will be powerful enough to control production, but the natural effect of economies in the purchase of seed, the disposal of products and the improvement of plants will be the reduction of prices to the English oil trade.

While allowing Mr. Bartlett and his associate, Mr. Flash, to carry out his own plan without modification, the British trade is acting entirely for itself and independently of any American trade amalgamation. There is as yet no concerted action between the trades of the two countries, nor any attempt to regulate prices by an international trust or combination. Some basis of common action may be arranged in the future. At any rate, the consolidated American oil seed trade will have the organized English trade to deal with hereafter instead of an unorganized trade made up of jealous and suspicious competitors. John R. Bartlett is well known in financial circles in this city. He is president of the Drawbaugh Telephone and Telegraph Company and of the Nicaragua Company, and has offices at 2 Wall street. Mr. Bartlett is a member of the Union League and Lotos clubs. Mr. Bartlett is a past master in the rather new profession of promoting consolidations. He reorganized the commercial business of the American Cotton Oil Company in 1891 and became its president. Three years afterward he left that concern to reorganize the Nicaragua Canal Company. He also became president of that, but soon resigned to look after other new interests, notably the Pegamoid Company.

In the great work now so successfully consummated, Mr. Bartlett has had the valuable assistance of Mr. Edward Flash, Jr., who is well known in the cottonseed oil industry on both sides of the Atlantic. Mr. Flash is now vice-president of the Williams & Flash Company, and was formerly connected with both of the large cotton oil companies—the American Cotton Oil Company and the Southern Cotton Oil Company. Mr. Flash has had many years' experience in the cotton oil business, both as merchant and shipper and as a manufacturer, and is generally considered in the trade as an expert in cottonseed matters.

The Price of Lard at Chicago.

July.	Cash.	July.	Sept.
1	4.97½@5.10	5.05 @5.10	5.20 @5.25
3	—@—	—@—	—@—
4	—@—	—@—	—@—
5	5.27½@5.30	5.07½@—	5.17½@5.22½
6	5.07½@5.10	5.07½@—	5.20 @5.22½
7	4.95 @4.97½	5.05 @5.07½	5.20 @5.22½

Patents Granted.

627,679—GREEN TRISAZO DYE AND PROCESS OF MAKING SAME.—Melchior Boniger and Jan Lagutt, Basle, Switzerland. Filed March, 1899. Issued June 27, 1899.

627,690—YELLOW WOOL DYE AND PROCESS OF MAKING SAME.—Julius Herbabny, Offenbach-on-the-Main, Germany. Filed Feb. 20, 1899. Issued June 27, 1899.

627,749—APPARATUS FOR CONCENTRATING ACIDS.—Oscar Guttmann, London, England. Filed March 7, 1899. Issued June 27, 1899.

627,774—APPARATUS FOR CONDENSING AND COOLING VAPORS OR LIQUIDS.—Thomas Fairley, Leeds, England. Filed Dec. 23, 1897. Issued June 27, 1899.

NAVAL STORES.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 35.

Saturday Evening, July 8, 1899.

SPIRITS TURPENTINE.—The past week has been active, both here and in the South, and values have advanced a total of 3½c. The first two days of the week were very quiet, owing to the fact that one was a holiday and the other practically so. On Wednesday a fair amount of business was done, and quotations were advanced 1c. in sympathy with a similar advance in Savannah. On Thursday advices from Savannah reported another advance because of large buying by exporters, and the local market immediately became firmer and quotations were advanced 2c., to 42c., for machines. On Friday offerings were limited and values were raised to 42½c. To-day there is a fair amount of inquiry and, while stocks are large, there are few sellers and the market closes strong at 42c. for Southerns and 42½c. for machine-made barrels. The stocks at Savannah are much reduced by the large buying for export and the close is very firm at 39½c. for machines.

ROSINS.—Pale rosins are scarce and in fair demand. Quotations have been advanced, and the tendency is still upward. Mediums are in larger supply, but there is a good demand. Prices are firm and slightly higher than a week ago. Low grades are plentiful and buyers show no interest. Values are consequently weak. There is a fair demand for all grades in Savannah, and pales are scarce. On Friday there was an advance of 5@10c. on the entire list. The total stocks have been reduced and are now about 10,000 barrels less than they were at this time last year.

TAR AND PITCH.—Tar has ruled firm, with only an ordinary jobbing business doing. Offerings are somewhat limited. Pitch has been dull, but prices are unchanged. We quote: Tar, regulars, $2@2.10; oils, $3.50@3.55; pitch, $1.70.

Savannah, Ga., July 7, 1899.

Spirits firm, at 39¼ bid; sales, 134, receipts, 1,119; exports, 328; stock, 13,475. Rosin firm; sales, none; exports, 1,940; stock, 116,367. Prices, A, B, C, D, $1.10; E, $1.15; F, $1.20; G, $1.30; H, $1.35; I, $1.40; K, $1.65; M, $1.95; N, $2.20; W. G., $2.35; W. W., $2.55.

Charleston, July 7, 1899.

Turpentine firm at 36c.; sales, none. Rosin firm; sales, none.

Wilmington, N. C., July 7, 1899.

Spirits turpentine steady at 38¼@38¾c.; receipts, 168 casks. Rosin steady at 90c. and 95c.; receipts, 538. Crude turpentine firm at $1.35, $2 and $2.10; receipts, 60. Tar firm at $1.30; receipts, 43.

Liverpool, July 7, 1899.

Turpentine—Spirits steady, 32s. 3d. Rosin—Common steady, 4s.

London, July 7, 1899.

Turpentine—Spirits, 30s. 7½d.

Messrs. James Watt & Sons furnish the following London turpentine statistics:

	1899.	1898.	1897.	1896.
Stock June 24	12,493	14,198	14,473	10,044
Del'd this week	2,035	2,038	1,334	1,454
Since Jan. 1	42,232	45,312	41,093	45,830
Price June 25	32s.9d.	21s.6d.	20s.9d.	19s.9d.
Sept.-Dec.	28s.3d.	20s.	20s.6d.	19s.3d.

ALBANY CHEMICAL CO.,
ALBANY, N. Y.
Manufacturers of
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Patent Collodion Solvent, Chloroform
Sulphuric Ether, Etc., Etc.

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PETROLEUM MARKET.

Saturday Noon, July 8, 1899.

The result of operations in the various fields during the month of June was a moderate increase in new production and very large increase in the number of wells completed, while the large increase in wells drilling and in rigs in course of erection shows that the failure to discover new pools has not proved sufficiently discouraging to check the active search for oil. The average production of the June wells in the older fields was small, but in Indiana and Ohio the average was fully as large as before, and, taken altogether, there was little change. The field situation, as revealed by the monthly report, has had its influence on the market, as it shows that there is little probability of a material increase in the total production, notwithstanding that the number of wells being drilled is larger. Since the incoming of the present month, however, a well has been brought in which partakes somewhat of the nature of an old-time gusher, and proves that all predictions as to exhaustion or unproductiveness of territory not thoroughly exploited are futile, and it may be possible that more such wells will be found. It will not require many such wells to materially increase the production and cause an important change in the statistical situation. The advance in the price of oil has stimulated operations on the Oil City Exchange, where the bids for certificates at 2c. above the price paid for credit balances has failed to find sellers.

Refined and Products.

The export movement depends almost entirely on the position of the tank fleet, and as that alters from week to week so do the exports to British and Continental ports, but the average requirements show an increase. The engagements during the past week reached about 200,000 bbls., nearly all for bulk shipment. The high freight rates tend to discourage the shipment of refined in barrels. The price of barreled oil has been advanced to 7.40c. for New York loading and to 7.35c. for Philadelphia loading. The principal foreign markets are firmer. Quotations to-day by cable were: Antwerp, 18f.; Bremen, 6.60 m.; London, 5⅝@5¾d., and Liverpool, 5¾@5⅞d. Freight rates were firmer at 2s.@2s. 1½d., hence to London, and 2s. 3d.@3s. 6d. to Continental ports, as to port and vessel. Home trade lots have been in fair request and are higher on the basis of 7¼c. for 150 deg. water white from tanks and 9¾c. in barrels.

Cases for export have been in light request, and sales of about 50,000 are reported. The price of plain tops has been advanced to 8.40c. Freight rates are firm. The nominal rates for large vessels are: For Amoy, 23@24c.; Bombay, 16½@17c.; Calcutta, 16@17c.; Colombo, 22@23c.; Java, 20@22c.; Padang, 22@23c.; Hong Kong, 22@23c.; Saigon, 20@22c.; Shanghai, 24@25c.; Singapore, 18@19c., and Yokohama, 23@24c.

Crude for export has been in active request, and sales of about 75,000 barrels are reported. Washington crude is quoted at 7.40c. in barrels. Cases for export have not been in request and no sales are reported.

Prime city naphtha has been steady at 10c. For export, no sales are reported.

Closing Quotations.

CRUDE.

National Tran. Certificates, ℔ bbl.	$1.20 @1.20½
Washington crude in bbls., ℔ gal	7.40
Washington crude in bulk	4.90
Residuum, bbls. for export	4¼@ 4¾

CRUDE AT THE WELS.

The following are the prices paid by the pipe lines for crude as delivered from the wells:

	1899.	1898.
Tiona, ℔ bbl.	$1.34	$1.02
Scio	1.29	—
Pennsylvania	1.19	92
Barnesville	1.09	82
Corning	1.02	75
New Castle	94	67
North Lima	88	67
South Lima	83	62
Indiana	83	62

REFINED—FOR EXPORT.

Cargo lots for export, ℔ gal.	— @ 7.40
In bulk	— @ 4.90
Philadelphia loading	— @ 7.35

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

120 fire test, S. W., ℔ gal.	— @ 8½
130 fire test, S. W.	— @ 8¾
150 fire test, W. W.	— @ 9¾
in bulk from tanks	— @ 7¼
300 fire test	8½@ 9

REFINED IN CASES—110 FIRE TEST.

Two five-low screw, cargo lots	8.40
5,000 to 10,000	8.50
1,000 to 5,000	8.60
700 to 1,000	8.70
400 to 700	8.80
300 to 400	8.90
200 to 300	9.00
100 to 200	9.30
Under 100	9.40

NAPHTHA AND GASOLENE.

Naphtha, crude, car lots, 68@72 deg.	— @10
Naphtha, crude, cargo lots, 68@72 deg	— @10
Naphtha, crude, 70 deg.	10 @10½
sweet, 62 or 63 deg.	11½@12
70 deg.	12 @12½
76 deg.	12½@13
"stove"	11½@12
Gasolene, 86 deg.	14 @15
88 deg.	16 @17
90 deg.	19 @20

Petroleum Statistics.

RUNS—PENNSYLVANIA OIL.

		Day.	Total.	Av'ge.
Friday,	June 30	110,650	2,248,962	74,965
Sat.-Sun.,	July 1 & 2	60,438	60,438	30,219
Monday,	" 3	....	60,438	20,146
Tuesday,	" 4	....	60,438	15,109
Wednesday,	" 5	119,577	180,015	36,003
Thursday	" 6	80,112	260,127	43,355

	1896.	1897.	1898.	1899.
Jan.	2,676,193	2,670,695	2,745,712	2,420,071
Feb.	2,473,288	2,637,771	2,442,436	2,222,889
March.	2,676,264	2,911,172	2,814,029	2,649,528
April.	2,879,698	2,789,575	2,652,552	2,618,249
May.	2,839,602	2,852,124	2,681,118	2,765,791
June.	2,811,414	2,929,868	2,566,767	.....
July.	2,919,382	2,992,632	2,487,691	.....
Aug.	2,870,915	3,062,668	2,622,849	.....
Sept.	2,772,212	3,002,002	2,525,032	.....
Oct.	2,858,544	3,023,053	2,487,837	.....
Nov.	2,701,688	2,948,854	2,485,140	.....
Dec.	2,916,148	2,894,296	2,589,197	.....
Year.	33,445,571	34,724,700	31,100,360	.....
Avge.	2,787,964	2,893,725	2,591,697	2,535,306

DELIVERIES—PENNSYLVANIA OIL.

		Day.	Total.	Av'ge.
Friday,	June 30	86,959	2,358,726	78,624
Sat.-Sun.,	July 1 & 2	130,458	130,458	65,229
Monday,	" 3	....	130,458	43,486
Tuesday,	" 4	....	130,458	32,614
Wednesday,	" 5	133,378	263,816	52,765
Thursday	" 6	92,172	355,988	59,331

	1896.	1897.	1898.	1899.
Jan.	2,532,604	2,533,263	2,903,813	2,475,510
Feb.	2,248,406	2,305,390	2,132,151	1,899,859
March.	2,436,008	2,772,133	2,625,124	2,635,445
April.	2,223,092	2,453,728	2,421,383	2,377,483
May.	2,418,434	2,546,693	2,392,839	2,578,579
June.	2,218,782	2,355,959	2,134,814	.....
July.	2,510,180	2,707,317	2,563,391	.....
Aug.	2,404,095	3,100,208	2,695,584	.....
Sept.	2,539,922	2,951,221	2,585,253	.....
Oct.	2,594,520	3,028,538	2,839,481	.....
Nov.	2,494,528	3,312,597	2,398,056	.....
Dec.	2,603,638	2,753,008	2,375,731	.....
Tls.	29,284,210	33,621,058	30,367,611	.....
Avge.	2,440,351	2,801,755	2,530,634	2,393,376

CHARTERS—CRUDE EQUIVALENT.

		Day.	Total.	Av'ge.
Friday,	June 30	85,714	2,179,118	72,637
Sat.-Sun.,	July 1 & 2	250,833	250,833	125,416
Monday,	" 3	40,476	291,309	97,103
Tuesday,	" 4	....	291,309	72,827
Wednesday,	" 5	46,032	337,341	67,468
Thursday,	" 6	42,540	379,881	63,313

	1896.	1897.	1898.	1899.
Jan.	1,834,675	1,960,649	2,701,308	1,736,232
Feb.	1,759,056	1,692,064	1,882,355	1,550,794
March.	2,231,547	1,917,670	2,203,141	2,461,826
April.	1,755,524	2,324,256	1,759,600	1,855,857
May.	1,929,212	2,101,829	1,971,260	2,214,071
June	2,444,060	2,204,998	2,325,911	2,179,118
July.	2,366,000	2,533,853	1,991,972	.....
Aug.	2,440,557	2,176,978	2,327,140	.....
Sept.	2,363,692	2,524,897	2,105,151	.....
Oct.	2,218,573	2,619,428	1,670,084	.....
Nov.	2,164,114	2,360,634	1,611,940	.....
Dec.	2,103,771	1,968,572	1,424,940	.....
Year.	25,610,781	26,386,028	23,973,908	.....
Av'ge.	2,134,882	2,198,830	1,997,820	1,999,649

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, &c., in bulk, barrels and cases, during the week ending July 7, and from Jan. 1, were as follows:

	Week.	Year.	1898.
Refined, bbls. & blk.	203,700	5,044,000	5,560,300
Refined, cases	14,000	8,497,000	10,253,000
Crude, bbls. & blk.	73,100	986,800	1,034,300
Crude, cases	20,000	20,000	67,000
Naphtha, bbls.	....	60,000	136,300
Residuum, bbls.	9,500	259,300	248,100
Lubricating, bbls.	6,500	15,500	8,000
Barrels, cde. eq.	419,564	12,591,595	13,288,279

CLEARANCES FOR THE WEEK.

During the week ending July 7, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York were as follows:

	Week.	Year.	1898.
Refined	7,218,967	336,168,920	272,999,308
Crude	.....	1,047,110	1,015,312
Naphtha	270	3,569,377	4,351,229
Residuum	475,000	4,709,535	1,165,483

EXPORT STATISTICS.

The following table shows the total exports from the port of New York and from the United States reduced to crude equivalent, in gallons, for the week ending July 7; also total shipments to date, with comparison with 1898:

From N. Y. for week ending July 7.	9,623,709
Total from N. Y. from Jan. 1, 1899.	316,537,416
Same period last year	375,014,076
Decrease	58,476,660
From U. S. for week ending July 7.	23,532,481
Total from U. S. from Jan. 1, 1899.	516,106,750
Same period last year	623,402,028
Decrease	107,295,278

TOTAL EXPORTS BY PORTS.

	1899.	1898.
New York	316,537,416	375,014,076
Philadelphia	178,745,091	220,534,580
Baltimore	17,889,187	27,090,893
Boston	441,259	701,613
San Francisco	493,797	347,866
Grand total	516,106,750	623,402,028

Foreign Quotations.

REFINED.

	Antwerp.	Bremen.	London.
Monday	18 @—	6.55	5⅝@5¾
Tuesday	18 @—	6.55	5⅝@5¾
Wednesday	18 @—	6.55	5⅝@5¾
Thursday	18 @—	6.55	5⅝@5¾
Friday	18 @—	6.55	5⅝@5¾
Saturday	18 @—	6.60	5⅝@5¾

PETROLEUM CHARTERS.

New York.

Following is a list of vessels chartered and loading or to load petroleum at New York, Philadelphia, Baltimore and Boston. Quantities are refined in bbls. unless stated otherwise:

Week ending Feb. 3.

Br bk Samaritan, Shanghai, 25c. 80,000

Week ended Feb. 24.

Br. bk. Thistlebank, Java, 20, 21 and 22c. ..... cs. 90,000
Br. shp. St. Mirren, Japan, 23@24c. ..cs. 85,000

Week ended March 3.

Ger shp Renee Rickmers, Japan, 23c, cs. 75,000

Week ended March 10.

Ger str Ithaca, Hong Kong, 26c. ....cs 100,000

Week ended March 24.

Am shp St. John, Japan, 21@22c. ....cs 70,000
Br bk Bandaneira, Shanghai, 26c. ....cs 80,000
Br shp Dovenby Hall, Shanghai 26c..cs 90,000
Br shp John Cooke, Shanghai, 26c. ....cs 65,000

Week ended March 31.

Am shp Dirigo, Hong Kong, 23c. ....cs 120,000
Br bk Howard D. Troop, Shanghai, 25c. ..... cs 90,000
Br shp Troop, Shanghai, 25c. ..... cs 65,000
Br bk Lydgate, Shanghai, 26c. ..... cs 100,000
Br bk Galgate, Shanghai, 26c. ..... cs 80,000

Week ended April 14.

Ger bk Ariadne, Ger Baltic, 2s. 6d. 3,300

Week ended April 28.

Br shp Kistna, Calcutta, 16½c. ..... cs 80,000
Br bk Glencaird, Calcutta, 16½c. ..... cs 95,000
Br bk Glenclova, Calcutta, 17c. ..... cs 95,000

Week ended May 5.

Dch bk Nil Desperandum, Java, 20, 21 & 22c. ..... cs 45,000
Am shp Henry Villard, Tsintau and Kaochow Bay, 24c. ..... cs 55,000
Am brg Harry Smith, Canary Islands, p. t. ..... cs 20,000

Week ended May 12.

Am shp Samuel Skolfield, Mauritius, p.t. cs 50,000
It bk Avanti Savola, Saigon, p. t. ...cs 50,000

Week ended May 19.

Br shp Boadicea, Rangoon, p. t. ..... cs 70,000
Br shp Orealia, Shanghai, 24c. ..... cs 70,000

Week ended May 26.

Br bk Springbank, Java, 20, 21 & 22c. cs 100,000
Am shp R D Rice, Japan, 21@22c. ....cs 80,000
— shp Nagasaki or Fusaw, 21½ @23½c. ..... cs 70,000
Am shp L Schepp, Japan, 21@22c. ....cs 65,000

Weew Ended June 2.

Dch bk Willem Eggerts, Java, 20, 21@ 22c. ..... cs 50,000
Ger shp Louise, London, 2s. 5½d. ....nap 9,000
Br shp Genista, Shanghai, 24c. ..... cs 70,000

Week ended June 9.

Br bk Annasona, Rangoon, 19c. ..... cs 55,000
It bk Fede, Saigon, 23c. ..... cs 50,000

Week ended April 28.

Br bk Still Water, Zanzibar, 23c. ..... cs 40,000
It bk Madonna Pompei, Naples, 13½c. cs 28,000
Dch bk Krimpen a d. Lek, Java, 20, 21 @22c. ..... cs. 40,000

Week ended June 23.

Am shp Paramita, Chefoo, 24c. ..... cs 55,000
Ger shp R C Rickmers, Tientsin, 24c. .cs 65,000

Week ended June 30.

Dch bk Burgemeester-Jonkheer Coenen Godthelp, Japan, 20, 21 & 22c. ..... cs 60,000
Ger shp Landseer, Blaye, 3s. 6d. ....cde 8,400
Am shp John Currier, Hong Kong, 21c. ..... cs 70,000

Week ended July 7.

It bk Francisco, Cette, 2s. 11d. 5,000

Philadelphia.

Week ended March 3.

Br shp Allegiance, Japan, 23@24c. ...cs, 48,000
Br shp, Japan, 22 & 23c. ..... cs, 60,000

Week ended March 10.

Ger shp Mabel Rickmers, Japan, 23@ 24c. ..... cs 80,000

Week ended April 21.

Br bk Alcides, Calcutta, 17c. ..... cs 100,000

Week ended April 28.

Br bk Amazon, Japan, 22@23c. ..... cs 80,000

Week ended May 5.

Ger bk Lisbeth, Japan, 22@23c. ..... cs 100,000
Br shp Cumberland, Japan, 22 & 23c. .cs 70,000
Ger shp Theo. Fischer, Marseilles, p. t. ..... cde 10,000

Week ended May 12.

Nor shp Sydfid, Japan, 22@23c. ..... cs 65,000

Week ended May 19.

Br sh Victoria Regina, Java, 20, 21 & 22c. ..... cs 80,000

Week ended May 26.

Am shp A J Fuller, Japan, 21 & 22c. .cs 70,000
Ger str Theodore Fischer, Marseilles, 2s. 4½d. ..... cde 11,000

Week ended June 9.

Br str Strathord, Japan, p. t. ..... cs 85,000

Week ended June 23.

It bk Carmela C, Lisbon, 3s. 4,000
Ger shp Leonora, Marseilles, 2s. 4d. .cde 9,500
It bk Michaele A, Lisbon, 2s. 9d. 5,000
Ger shp Erik Rickmers, Japan, 22@ 23c. ..... cs 80,000

Week ended June 30.

Br str St Irene, Japan, 26c. ..... cs 125,000
Br str Abergaldie, Japan, 26c. ..... cs 100,000
Br str Acara, Japan, 27c. ..... cs 125,000
Br bk Chas E Lafurgey, London or Liverpool, 3s. 5,500

Week ended July 7.

Ger bk Kiandra, London, 2s. 10½d. ..lub 6,500

PETROLEUM CLEARANCES.

Following are the clearances of petroleum from the ports of New York, Philadelphia, Baltimore, Boston and San Francisco on the dates named. Refined unless otherwise specified:

New York.

June 14.

Br str Parana, Montevideo, 2,880 cs ref & 27 cs ben

June 27.

Br str Manhattan, London, 200 bbls
Am str San Marcos, Porto Rico, 1,260 cs

June 28.

Am str Matanzas, Tampico, 10 cs
Br str Willowdene, Demerara, 520 cs
Br str Willowdene, Barbadoes, 2,200 cs
Br str Willowdene, St Lucia, 100 cs

June 29.

Br str Athos, Colon, 1,411 cs
Br str Heathdene, Aden, 150 cs
Ger str Erna, Hayti, 720 cs

June 30.

Am sh Com. T. H. Allen, Yokohama, 75,806 cs
Br str Rocklight, Dover, 1,319,210 gls blk
Br str Roman Prince, Santos, 12,500 cs
Br str Idaho, Hull, 12 bbls
Br str Alps, Hayti, 1,307 cs & 3 bbls
Br str Buffon, Rio Janeiro, 15,500 cs
Br str Alleghany, Kingston, 2 bbls
Br str Alleghany, Savanilla, 1 bbl & 13 cs
Br str Alleghany, Port Limon, 34 bbls & 375 cs
Span str Manuel L Villaverde, Cartagena, 1,000 cs
Br str Newlyn, Buenos Ayres, 25,425 cs
Br str Newlyn, Montevideo, 11,700 cs
Dtch str Prins Willem V, Hayti, 315 cs & 1 bbl
Dtch str Prins Willem V, Guanta, 200 cs
Dutch str Prins Willem V, Trinidad, 1,000 cs
Br str Ardandhu, Belize, 1 bbl & 10 cs
Br str Ardandhu, Puerto Cortez, 140 cs
Br str Ardandhu, Inagua, 2 bbls & 50 cs
Br str Ardandhu, Kingston, 945 cs
Br str Ardandhu, Annatto Bay, 25 cs

July 1.

Nor str Adria, San Domingo, 1 bbl
Sch T Towner, St Croix, 150 cs

July 3.

Ger str Burgermeister Peterson, Flushing, 1,275,000 gls blk

July 5.

Dtch sh De Ruyter, Anjier, 67,500 cs
Br str Phosphor, Dover, 450,000 gls ref blk & 475,000 gls resid blk
Br sch Raeburn, Kingston, N B, 25 bbls
Br bk Angara, Pernambuco, 14,491 cs

July 6.

Ger str Heligoland, Rotterdam, 1,200,000 gls blk
Br sh Erne, Calcutta, 60,000 cs
Am sch Jennie A Stubbs, Cayenne, 300 cs

Philadelphia.

June 24.

Ger str Paula, Bergen, 1,180,074 gls blk & 750 cs
Ital bk Caterina Cacace, Girgenti, 29,332 cs
Br str Darial, Manchester, 1,210,028 gls blk

June 26.

Ger sh Fritz, Marseilles, 100 cs ref & 9,614 bbls cde

June 28.

Br str Vedra, Flushing, f o, 1,759,080 gls blk
Am bk Vidette, Havana, 20,507 cs cde
Span str Ciudad de Reuss, Dieppe, 736,361 gls cde blk

June 29.

Fr bk Alice et Isabelle, Sables D'Olonne, 308,917 gls cde

June 30.

Ger str Brilliant, Flushing, f o, 1,396,345 gls blk
Br str Tancarville, Dunkirk, 916,745 gls cde blk
Br sh Aladdin, Anjier, f o, 63,500 cs
Br str Batoum, Dunkirk, 1,600,000 gls cde blk
Aust str Etelka, Havre, 1,014,850 gls cde blk

San Francisco.

June 24.

Sch Allen A, Kahului, 1,100 gls gas

June 28.

Str Peru, Central America, 25 cs

June 30.

Bark Edward May, Hilo, 200 cs

EXPORTS OF PETROLEUM.

Following are the exports of petroleum from the port of New York, in gallons, during the past week and since Jan. 1, as also the exports during the corresponding period of last year:

Refined.

	For week.	Since Jan. 1.	Last year.
Aalborg	.....	497,037	523,203
Aarhuus	.....	870	1,206,700
Adelaide	.....	550,400	993,450
Aden	1,500	67,500	110,000
Alexandria	.....	310,540	.....
Algiers	.....	350,400	900,959
Algoa Bay	.....	472,490	250,539
Amoy	.....	525,000	.....
Amsterdam	.....	6,246,000	5,142,500
Anjier, f. o.	675,000	8,329,350	6,139,540
Antigua	.....	23,309	24,410
Antofagasta	.....	15,000	12,000
Antwerp	.....	8,930,420	9,615,000
Arica	.....	8,000	4,250
Arichat, N. S.	.....	.....	150
Auckland	.....	229,540	204,100
Avonmouth	.....	8,850,000	2,850,000
Azores	.....	100,724	130,516
Bahamas	602	3,724	1,781
Bahia	.....	718,350	1,395,540
Bangkok	.....	.....	843,020
Barbadoes	22,000	77,000	333,150
Baranquilla	.....	62,550	71,000
Barraw	.....	.....	475,000
Beira	.....	46,000	6,500
Belfast	.....	.....	850,000
Belize	151	84,771	123,170
Bermuda	.....	127,620	136,223
Bluefields	.....	8,120	31,010
Bocas del Toro	.....	33,000	10,777
Bombay	.....	1,445,440	2,199,990
Brisbane	.....	256,320	731,200
Buenos Ayres	250,250	3,442,482	4,752,440
Calcutta	600,000	2,678,480	6,348,360
Caldera	.....	1,750	1,750
Callao	.....	161,000	271,940
Campeche	.....	660	2,000
Canary Islands	.....	805,800	50,000
Cape Coast	.....	195,160	.....
Cape Gracias	.....	3,160	1,548
Cape Town	.....	941,354	448,602
Cartagena	10,000	155,822	209,996
Carupano	.....	23,100	40,470
Ceara	.....	123,200	149,640
Charl't'n, PEI.	.....	.....	11,000
Christiania	.....	1,275,000	.....
Ceiba	.....	2,750	1,000
Ciudad Bolivar	.....	15,040	49,720
Colombo	.....	100,000	.....
Colon	14,100	236,463	282,980
Copenhagen	.....	.....	614,500
Corinto	.....	.....	98,000
Cork	.....	394,995	391,500
Coro	.....	7,370	14,200
Corral	.....	45,000	25,000
Cuba	.....	199,189	247,548
Cumana	.....	300	6,700
Curacoa	.....	84,140	94,461
Delagoa Bay	.....	195,050	175,500
Demerara	5,200	232,420	304,800
Desterro	.....	222,390	254,560

Domenica		19,088	11,350
Dover, f. o.	1,769,210	12,921,310	15,830,000
Dublin		1,600,000	1,999,200
Dunedin		285,120	376,800
Dutch Guiana		149,352	141,500
East London		399,931	490,872
Esjerb			116,900
Eten		7,000	2,000
Flushing, f. o.	1,275,000	65,333,000	65,007,650
Frederica		638,250	358,500
Freemantle		805,200	419,000
French Guiana	993	37,604	67,757
Frontera		5,000	
Gefle			959,825
Gibraltar		282,528	388,700
G'd Bas, WCA			100,000
Grenada		59,050	44,250
Greytown		58,450	79,224
Guadaloupe		64,000	138,350
Guanta	2,000	6,000	4,450
Guayaquil		189,000	157,300
Halifax		102,072	19,866
Hamburg		90,500	8,754,500
H. Breton, N.S.		1,033	3,124
Havre		600	213,934
Hayti	23,622	322,593	360,041
Hernosand		307,050	398,500
Hiogo			943,500
Hodeidah		80,000	760,000
Hong Kong		11,001,420	7,377,040
Honolulu		405,000	225,000
Hull	600	1,101,100	32,900
Iquique		4,000	3,000
Iquitos			1,320
Jamaica	9,473	550,709	527,638
Kingston, N.B.	1,250	1,250	
Kjoge			261,000
Koenigsberg			130,900
Kolding		141,197	
Lagos		198,000	
La Guayra		277,560	371,229
Laguna		200	
La Libertad			200
La Plata		20,000	30,000
Limerick			460,500
Lisbon		28,563	65,100
Liverpool		4,330,054	5,105,200
Liverpool, N. S.		31,000	
Livingston		10,479	9,657
London	10,214	15,461,620	14,166,415
Londonderry			180,000
Lulea		109,750	
Lyttleton		132,800	216,000
Macassar, f. o.			302,710
Maceio		247,000	409,000
Madeira		28,000	26,000
Manaos		268,055	209,169
Manchester		527,950	
Maracaibo		97,280	92,465
Maranham		146,182	231,222
Martinique		258,331	124,600
Mauritius		288,000	
Melbourne		1,762,460	3,916,385
Mocha			100,000
Mollendo		10,000	
Molucas		92,000	
Montevideo	143,000	964,612	2,044,330
Montserrat		1,384	1,200
Mossel Bay		31,500	64,370
Naples		230,831	
Nassau		54,435	70,878
Newcastle, Aus.			141,000
Newcastle, Eng.		5,000	5,000
Old Providence			1,015
Oporto		245,594	314,986
Oran		206,600	52,457
Palermo			216,903
Passamayo		11,000	11,500
Para		698,378	1,115,163
Parahyba		100,000	135,720
Payta		2,000	5,000
Penang		1,152,010	1,684,970
Pernambuco	144,910	1,000,150	1,884,950
Philippine Isl'ds			520,000
Pimental		7,000	2,000
Pisco			8,000
Pitea		75,000	
Plymouth		1,328,172	
Port Chalmers		2,400	
Port Elizabeth		480,266	201,452
Portishead		32,102	11,400
Port Limon	5,454	52,246	49,374
Port Natal		1,174,470	716,370
Porto Cabello		175,820	198,501
Porto Rico	12,550	26,470	131,940
Progreso		11,920	4,030
Puerto Barrios		10,500	12,454
Puerto Cortez	1,396	17,036	20,627
Punta Arenas		32,000	39,124
Queenstown			334,630
Rangoon			443,930
Reunion		260,000	
Rio G. do Sul		764,572	795,563
Rio Janeiro	155,000	1,240,500	1,790,864
Rosario		864,776	1,115,979
Rotterdam	1,200,000	23,033,000	27,283,930
Saigon			809,760
Salaverry		26,000	26,000
Samarang		917,210	
San Andreas		26,743	27,574
San Domingo	51	145,181	372,739
San Fernando		4,800	13,800
Santa Martha		500	900
Santos	125,000	2,144,260	1,716,760
Savanilla	171	95,783	122,965
Shanghai		10,586,630	23,825,000
Sierra Leone		20,350	10,000
Sligo			239,600
St. Croix	1,500	29,160	27,615
St. John, N. B.		18,200	1,000
St. John's, N. F		237,805	236,860
St. Kitts		52,800	54,310
St. Lucia	1,000	28,864	32,594
St. Martins		1,710	3,400
St. Nazaire		359,900	
St. Pierre, Miq.			1,538
St. Thomas		23,850	16,050
St. Vincent, C.V		29,250	30,040
Stockholm		887,450	1,207,000
Sundsvall			310,000
Sunderland		1,270,000	
Svendborg			403,595
Sydney		2,263,090	2,733,230
Talcahuano		2,079,500	2,030,800
Tampico	100	6,140	100,152
Townsville			96,000
Trinidad	9,600	303,235	316,326
Truxillo		3,350	5,570
Tuborg, Denm'k		352,245	
Turks Island		5,485	4,627
Valparaiso		799,760	824,500
Vera Cruz		9,500	6,000
Victoria			30,000
Waterford		203,389	
Wellington		298,640	7,098,130
Yokohama	758,000	3,033,670	9,422,260
Zanzibar		380,000	530,000
Totals	7,218,967	236,304,910	273,001,104

Crude.

Algoa Bay			5
Brisbane			13,178
Demerara			526
Frontera			100
Havana		1,451,900	773,039
Melbourne			10,000
Portishead			310
Porto Rico		135,000	218,150
Santiago		200	
St. Johns, P. R.		160,000	
Tampico		100,000	
Totals		1,387,100	1,015,312

Naphtha.

Adelaide		2,156	4,640
Algoa Bay		30	450
Auckland		3,840	
Bahia		775	1,475
Belize			152
Bermuda		7,760	4,245
Bremen			350,250
Brisbane		610	4,240
Buenos Ayres		74,255	34,819
Cape Town		1,437	3,720
Copenhagen			25,400
Cuba		697	3
Curacoa		584	895
Delagoa Bay		1,500	200
Dublin			25,000
Dunedin		7,409	4,800
East London			400
Freemantle			822
French Guiana			57
Gefle			20,500
Halifax			5
Hayti		20	4,312
Honolulu		800	
Hull		74,797	100,000
Jamaica		104	254
La Guayra			70
Lisbon			300
Liverpool		903,342	1,375,126
London		1,822,743	2,168,600
Lyttleton		3,080	7,873
Manaos		6,840	7,215
Maracaibo		48	
Maranham		95	19
Melbourne		54,642	37,006
Montevideo	270	2,940	2,124
Mossel Bay		114	
Para		285	7,809
Pernambuco		10	
Puerto Cortez			125
Port Elizabeth		50	
Portishead		388,643	443,350
Port Limon		64	100
Port Natal		820	1,240
Porto Rico		672	237
Queenstown			51,120
Rio Janeiro		475	2,950
Rotterdam		10	
Santos		3,000	2,200
St. Croix		45	90
St. John, N. B.			250
St. John's, N.F.		80	100
St. Nazaire		50,014	12,544
St. Thomas			5
Savanilla		200	458
Stockholm		126,984	67,131
Sydney		12,048	40,200
Trinidad			14,544
Tuborg, Denm'k		8,000	
Valparaiso		400	
Victoria			500
Wellington		4,398	2,059
Totals	270	3,569,512	4,724,857

New Color Binders.

BY L. E. ANDES.

Under various cleverly chosen names certain liquids have of late been placed upon the market, which are to be used for mixing with pulverous pigments and are said to possess the following advantages: 1. Quick drying capacity. 2. Perfect freedom from tackiness. 3. Great hardness. 4. Odorless drying, etc., etc.; so that in urgent cases floors, etc., can be painted and rendered fit for use within twenty-four hours by the employment of these preparations for mixing and coating. Old sticky coats are said to become hard and smooth by a double coating with same. A number of painters express their satisfaction with these new binders in testimonials, and it seems as though a large business were done in this article, at least I know of a foreign city which takes this preparation by the carload.

What can be the composition of these new binding agents? A trade journal gives us the following information. The analysis of one of these preparations showed the following composition: Oil of turpentine 65.9 per cent., amber 13.5 per cent., lead-manganese 1.5 per cent. (probably manganic plumbate) and linseed oil varnish 19.1 per cent., so that the product no longer possesses the nature of an oil, but of a varnish. The observation appended to the result of the analysis caused the manufacturer to make the following declaration: "Under the name of floor oil is generally understood a raw, simple oil. Hence the product examined may rightfully be termed as it is; according to the testimonial of a chemist it contains a constituent which is little known and possesses great drying capacity."

The new binders are quickly characterized. They are pale brownish-yellowish thin liquids with a pronounced odor of oil of turpentine which, applied on non-drying surfaces, draw off quickly, dry rapidly, but still remain tacky after twenty-four hours. If the liquid parts are exposed to the air for some time the oil of turpentine evap-

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Adapted to all kinds of Gas Machines. 86°, 88° and 90° Gravities.

Pratt's Deodorized Stove Gasolene For use in Vapor Stoves. Made in accordance with the recommendations of the Vapor Stove Manufacturers and guaranteed not to smoke, smell or gum the burner.

Redistilled Naphthas Also Fuel Oil, Lima Crude, Distillates, &c.; prepared especially for Gas Companies and obtainable either in barrel or tank car.

Boulevard Gas Fluid For use in Vapor Street Lamps, Plumbers' Torches, &c.

Double-Distilled Deodorized Benzine and Naphtha of all grades and gravities from 62° to 76°, for manufacturing varnishes and mixed paints, rubber and gossamer goods, floor and table oil cloths, as well as for general use of druggists, dyers, cleaners, etc., etc.

The above goods can be had in quantities to suit the purchaser everywhere in the East, either through our agents or from us direct.

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orates, a skin forms and underneath it is the product in the shape of a thick varnish of similar odor. Consequently the analysis, as reported by the trade paper, is not incorrect and the denomination from a practical standpoint would be that of a thin varnish.

If a pulverous pigment, such as f. i. French ocher, is made into a flouring paint with such a product and applied on wood, the coating which covers will, with one application, dry firmly within a few hours and also seems to possess some hardness, for it cannot be scraped off with a sharp knife, which is somewhat astonishing.

But, if the coat is treated with the knife, after three weeks have elapsed (perhaps even earlier, but that was the time that intervened between my painting the sample and looking at it again), there remains no trace of the hardness; the paint can be scraped off as a powder, it possesses no more adhesion to the surface, does no longer cohere in itself, which is natural considering its thinness. With the drying the resistive power departs.

If the priming is coated with the binder a moderate gloss results, but the application is not hard after twenty-four hours and can be scratched off after three weeks as powder and brittle chips.—Farben Zeitung.

New Drying Oils in Sight

An article in the "Seifensieder Zeitung" describes some new oils, which may prove of importance to the varnish and paint branch. I'Sano or Ungucko, the seed of a large tree of the family of Oleacinae, grows exclusively in Kuabi, near Brazzaville, and the Loango and Mt. Ponger districts, French Congo territory, West Africa. The fruit is a berry more than 3 cm. long, containing a brown oval nut (2.7 cm. long and 2.4 cm. thick). Its shell is about 1 mm. thick. The seed is grown together with the bottom of the cavity and fills it up almost entirely. In taste it resembles the hazelnut and the fruit is much liked by animals, while the natives do not use it for food purposes. The kernel, which constitutes 63 per cent. of the whole nut, is juicy and yields, on extraction with benzole, 60 per centum of oil. The latter has a reddish color, a disgusting taste and peculiar smell. It is very sticky, dries readily, is scarcely soluble in 90 per cent. alcohol, and possesses a specific gravity of 0.973 at 23 deg. Centigrade. On treatment with boiling water and litharge it changes into a paste which becomes hard after a while. Owing to its composition the oil is suitable for use in industry and probably may be employed in the place of linseed oil, to which it has considerable similarity Mohamba. These seeds resemble that of I'Sano in many respects and yield 65 per cent. of the kernel. The shells, like those of I'Sano, do not contain enough useful materials to be of any merchantable value, but the pits furnish 12 per cent. oil by extraction with benzole and leave a residuum, containing 19.5 per cent. of nitrogenous materials (equal to 3.12 of nitrogen), 7.62 of which is soluble in water, 1½ per cent. of sugar, 4½ per cent. of musilage and 43.33 per cent. of gum soluble in water starch. The ash is of like composition as that of the I'Sano cake, and the whole forms are a nutritious feed, rich in nitrogen and starch.

The oil of Mohamba seed is liquid to 15 deg. C. below zero, the color is yellow, the taste unpleasant, without odor. The specific gravity at 23 deg. C. is 0.915, and the solubility in 90 per cent. alcohol very slight. Treated with boiling water and litharge, a solid plaster forms.

The "Seifensieder Zeitung" says that the quantity of oil received so far was insufficient to conduct further experiments with this oil. It seems certain, however, that soon a number of chemists will concern themselves with effecting a utilization of the two oils in industry and trades.

INDUSTRIAL SECURITIES.

The past week has been a broken one and, as is usual, there has been a relaxation from active business, very many having made preparations for the annual Summer outing. The volume of trade, however, compares favorably with corresponding weeks in previous years, and while we are now in the midsummer season, when ordinarily business is dull, no important increase is to be expected. In the lines of trade represented by the Reporter there has been no cause for complaint, a full average seasonable movement being reported in drugs, chemicals, paints and dyestuffs, while for the more important oils the demand has been moderately active. The industrial situation has presented no phase differing from the very satisfactory condition heretofore noted, and nothing to indicate a prospective unfavorable change. The labor situation remains practically as it did a week ago, the intervention of three days of rest and recreation for the masses tending to distract their attention and defer action, while it has also tended to divert the energies of the turbulently inclined to more peaceful, if not less noisy, demonstrations. There are numerous threats of strikes, as there were a week ago, but it is believed that sober second thought will deter some and that strikes may be averted by concessions on the part of both parties in interest. The principal agricultural staples have shown but slight variation. Wheat opened on Wednesday at 80⅝c., which was also the highest for July delivery, and soon receded to 78¼c., but promptly recovered to 79c., and closed on Friday at 79⅛c. Corn varied between 38⅝@39¼c., and closed at 38¾c. Oats were nominal. Cotton has been remarkably steady, the extreme range of quotations for July delivery having been 5.57@5.62c., while the close on Friday was at 5.62c. Lard has also varied within unusually narrow limits, for July averaging at about 5.07½c. at Chicago, and closed at 5.05c. on Friday. The market for time money ruled steady and the supply continued ample, while the demand has been good and the volume of business has been of moderate extent. Rates at the close were 3 per cent. for sitxy to ninety days, 3¼@3½ per cent. for four to five months, and 3½@3¾ per cent. for longer periods, with somewhat higher rates where the collateral was largely made up of industrials. Money on call at the Stock Exchange has ranged from 2 to 6 per cent., with the bulk of business being done at 4@5 per cent., while the average was about 4½ per cent. The lower rate was reached on Wednesday only. The closing rate on Friday was 4 per cent. Mercantile paper has been in fair demand throughout the week, while the supply has been somewhat smaller. Rates at the close were 3¼@3¾ per cent. for sixty to ninety days' indorsements, 3½@4 per cent. for choice single names having four to six months to run, and 4@5 per cent. for other grades. No engagements of gold for export were reported during the past week. The price of silver varied slightly, but became steady and closed on Friday at 60½@61⅜c. for commercial bars and at 60¾@61¾c. for Government assay bars, showing but a slight change from the ruling price a week ago. Mexican dollars closed at 47¾c. bid and 49c. asked. The market for sterling exchange has been very quiet, with rates easier, the market closing quiet and easier. Rates for actual business at the close were 4.85@4.85⅛ for sixty days, 4.87⅛@4.87¼ for demand and 4.87¾@4.87⅞ for cables. The supply of grain and cotton bills was fair, while rates were easier and the demand moderate. Rates at the close were 4.84¼@4.84¾. The Industrials have been traded in to a fair extent and Sugar and Tobacco have been active, but there have been no market changes, there being nothing in the situation, financial or other, to affect this class of securities. The general list of securities dealt in on the Stock Exchange has been inclined to firmness and some of the favorite stocks have scored a substantial gain, while the volume of business during the past three days has been above the average.

Sugar stock was pulled down below 160 by bear operations, but there was a general belief that some settlement had been made with both the Arbuckle and Doscher interests and the stock quickly recovered. The sales were of considerable volume and the confidence shown was unmistakable. The last sale on Friday was at 160¾.

The fluctuations during the week have been from 157¼@161¾, the lowest today and the highest Thursday, closing to-day at 157¾ bid.

Cotton Oil stock developed considerable strength on reports of the good situation in the products of the concern, but beyond this there were no reports to affect the security either way. The last sale on Friday was at 38¾.

The fluctuations during the week have been from 37@39¼, the lowest Thursday and the highest Friday, closing today at 38¼ bid.

Lead stock varied but little from 30, and was but sparingly traded in. There was no news about the concern, and the last sale at 30¼ was at the highest.

The fluctuations during the week have been from 30@30¼, the lowest Wednesday and the highest Friday, closing today at 29½ bid.

Whisky stock received little attention, and there was no abatement of the feeling of distrust which the lack of information and the uncertainties as to the consolidation has engendered. The last sale was at 6¼.

The fluctuations during the week have been from 6¼@7, the lowest Wednesday and the highest Friday, closing to-day at 6½ bid.

Linseed Oil stock was not traded in, the best bid for transfer certificates being 3, while no bids were reported for stock of the new concern. At Chicago there were no sales of either common or preferred.

Tobacco stock advanced steadily from 92½ to 98½ and finally reached 98¾, but closed on Friday at 97½. The advance was due to the anonuncement of a quarterly dividend of 2 per cent. on its preferred stock and 1½ per cent. on its common stock, payable August 1.

Leather stock sold at 6@6½ and closed at 6¼. The improvement was attributed to the improved business of the concern.

Missouri Zinc Fields Company has declared a dividend of 2-3 of 1 per cent. on its preferred stock, payable July 10 to stockholders on record July 3.

The Boston Stock Exchange has placed on the unlisted department the negotiable receipts of the Old Colony Trust Company, representing shares in the American Agricultural Chemical Company, which is capitalized for $20,000,000 6 per cent. cumulative preferred stock and $20,000,000 common stock, par 100. The amount admitted for quotation is 170,000 shares of preferred and 170,000 of common.

In the following table are given the closing quotations Friday night. The market review is complete to Saturday's close:

Name.	Amount.	Bid.	Asked.	Last Sale Bonds.
Am. Cotton Oil Co.	$20,237,100	38½	39	
pref.	10,198,600	92	92½	
bonds 8% g. 1900.	3,068,000	—	—	106—June 23, '99
Am. Degras Co.	500,000	—	—	
Am. Fisheries Co.	10,000,000	—	—	
pref.	2,000,000	—	—	
Am. Linseed Co.	16,750,000	8¾	9¼	
pref.	16,750,000	44½	45½	
Am. Soda Fountain Co.	1,250,000	5	10	
pref.	1,250,000	50	58	
2d pref.	1,250,000	12	18	
Am. Spirits Mfg. Co.	28,000,000	6½	7	
pref. 5% limit.	7,000,000	29	30	
pref. 6% g. 1915.	2,000,000	—	—	92—July 6, '99
Am. Straw Board Co.	6,000,000	32	33	
Am. Sugar Refining Co.	36,968,000	158⅞	159	
pref. 7%	36,968,000	117	118½	
Am. Tobacco Co.	17,980,000	97⅜	97½	
pref. 8%	11,935,000	139	145	
div. scrip 1896.	3,762,000	—	—	102—July 6, '99
Celluloid Co.	3,000,000	88	91	
Chesebrough Mfg. Co.	500,000	337	345	
Con. Stock & Pet. Ex. Mem.	.....	—	—	$800—Feb. 9, '99
Diamond Match Co.	14,000,000	150½	151⅞	
Dixon Crucible Co.	.....	100	102	
General Chemical Co.	12,500,000	50	—	
pref. 6%	12,500,000	99	—	
Glucose Sugar Refining Co.	25,000,000	67¾	68½	
pref. 7%	14,000,000	107	107½	
Harrison Bros. & Co.	1,000,000	—	—	
pref.	1,500,000	—	—	
bonds 5%, 1924.	1,300,000	—	—	
International Pulp Co.	5,000,000	—	—	
National Lead Co.	14,905,400	30	30½	
pref. 7%	14,904,000	111¾	112½	
National Linseed Oil Co.	18,000,000	—	—	
6% gold deb.	1,400,000	3	4¼	
National Starch Co.	4,450,000	5	7½	
1st pref. 8%	2,219,400	45	60	
2d pref. 12%	1,846,800	15	23	
1st mort. 6%, 1920.	3,837,000	—	—	100—May 16, '99
National Wall Paper Co.	30,000,000	70	80	
bonds 8%	8,000,000	—	—	
New Jersey Zinc Co.	3,040,000	—	157	
Penn. Salt Mfg. Co.	2,000,000	113	115	
Pittsburgh Plate Glass Co.	9,850,000	142½	143½	
pref.	150,000	257	—	
P. Lorillard Co.	3,000,000	—	—	
pref.	2,000,000	118	122	
Planters' Compress Co.	.....	125	140	
Proctor & Gamble Co.	1,250,000	375	390	
pref.	2,250,000	190	200	
1st mort. bonds	.....	112	115	
Produce Ex. Membership	.....	—	—	100—June 28, '99
Quicksilver Mining Co.	5,708,700	2½	2⅞	
pref. 7%	4,291,300	11	11¾	
Royal Baking Powder Co.	10,000,000	—	—	
pref.	10,000,000	99	99½	
Southern Cotton Oil Co.	2,000,000	55	60	
Standard Distilling Co.	16,000,000	14	16	
pref.	8,000,000	—	63	
Standard Oil Co.	02,233,700	458½	460	
Stillwell, Bierce & Smith Valle Co.	500,000	—	—	
U. S. Leather Co.	52,711,100	6	6⅜	
pref. 8%	62,111,100	71¾	71⅞	
bonds 6% g.	5,280,000	—	—	118½—Mar. 9, '99
U. S. Playing Card Co.	3,600,000	—	—	
U. S. Printing Co.	3,500,000	—	—	
U. S. Rubber Co.	20,166,000	53½	54	
pref.	19,400,500	117½	118	

A New Test for Cocaine.

BY GEO. L. SCHAEFER.

There are two well known tests for determining the freedom of commercial cocaine salts from other coca alkaloids. These are the permanganate test for detecting cinnamyl-cocaine, and the ammonia test, popularly known as McLagan's test, for detecting the presence of the coca alkaloids which are resistant to permanganate.

While it is generally admitted that the permanganate test is sufficient to detect the presence of cinnamyl compounds, chemists have expressed some doubt regarding the value of McLagan's test. The writer has for some time been conducting experiments with the object of finding a substitute for McLagan's test which would allow of the rapid and accurate determination of the presence in cocaine salts of the coca alkaloids not indicated by the permanganate test.

As the result of numerous determinations, I have devised a test based on the fact that the chromates of these alkaloids are much less soluble than cocaine chromate, both in water and in water acidulated with hydrochlorate acid. The relative solubility of the chromates in acidulated water is about 1 to 500 in the case of cocaine chromate, and 1 to 5000 in the case of residual alkaloidal chromates.

I therefore offer the following as a simple and satisfactory method of determining the purity of cocaine salts: 0.05 gram cocaine hydrochloride is dissolved in 20 cc. of distilled water, mixed with 5 cc. of a 3 per cent. solution of chromic acid, and to the mixture 5 cc. of a 10 per cent. solution of hydrochloric acid are added. It is advisable to keep the temperature of the solution at 15 degrees C. If the cocaine hydrochloride is pure a clear solution will result. If other than traces of foreign coca bases are present the solution becomes cloudy at once, or in a few minutes, according to the amount of impurity present.

It is advisable to make the test side by side with a specimen of known purity for comparison.—Am. Chem. Journal.

THE

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G, EXCHANGE BUILDINGS. LIVERPOOL, ENGLAND

Manufacturers of Sulphuric Acid

BROWN VITRIOL, RECTIFIED VITRIOL, MONOHYDRATE, HIGH TEST SULPHATE OF SODA OR SALT CAKE, in bulk, or ground and packed. HYDROCHLORIC ACID, Common or Purified, CHLORIDE OF CALCIUM,

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SODA ASH, all strengths, by AMMONIA and LE BLANC PROCESSES, REFINED ALKALI, all strengths BICARBONATE OF SODA, high strength.

CRYSTAL CARBONATE
CAUSTIC SODA 60% to 77%

Caustic and Carbonate of Potash

SAL AMMONIAC, MURIATE OF AMMONIA
SULPHATE OF AMMONIA, SULPHATE OF ALUMINA.

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HYDRATED PEROXIDE OF MANGANESE for Gas Purification

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Paraffine
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jam and preserves by pouring a little melted paraffine on top of each glass and jar. It will harden immediately and form a covering that will keep the preserves sweet, clean and as soft and fresh at the top as at the bottom. Perfectly pure, tasteless, odorless, airproof, waterproof, acid proof and a protection against vermin and mould. Paraffine is sold in pound packages for household uses at drug, grocery and general stores.
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THE CINCINNATI TRANSFER CO.,

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Mica Axle Grease is very satisfactory in every respect. Quite superior to any axle grease we have ever used before. W. J. Winterbottom, Supt.

We endorse the above.

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I have used Mica Axle Grease for about eight years with the very best satisfaction. It doesn't run off the axle in hot weather; and it doesn't chill and harden in cold weather. I have used almost all other makes of axle grease and consider the Mica worth more than twice as much as any other for my use. J. C. Carpenter, dealer in coal and wood.

Manufactured by the

STANDARD OIL COMPANY

Fertilizer Shipments.

The following tabulated statement shows the shipments of fertilizers from the port of Charleston, S. C., from September, 1897, to April, 1898, and September, 1898, to April, 1899, both inclusive:

	1897. Sept.	1897. Oct.	1897. Nov.	1897. Dec.	1898. Jan.	1898. Feb.	1898. Mch.	1898. Apl.	1898. Sept.	1898. Oct.	1898. Nov.	1898. Dec.	1899. Jan.	1899. Feb.	1899. Mch.	1899. April.
C. & S. R. R.	744	473	1,171	4,577	27,409	43,047	24,551	1,447	685	2,054	1,902	734	5,333	15,281	27,598	3,120
A. C. L. R. R.	414	740	275	1,270	9,880	28,914	25,921	5,170	1,822	2,072	412	432	6,696	23,810	41,189	6,729
S. C. & G. R. R.	2,988	6,089	7,834	9,944	32,122	59,017	38,251	4,400	5,340	6,127	4,262	2,240	8,485	23,979	46,681	8,513
River steamers	...	...	12	45	690	1,508	2,000	143	...	7	2	5	860	1,419	2,040	792
Various	...	...	...	...	...	...	...	2,666	...	...	...	...	...	...	...	1,172
	4,146	7,302	9,292	15,836	70,101	133,086	90,783	13,826	7,847	10,260	6,578	3,411	21,374	64,489	117,508	20,326

1897-98 Grand total .....344,372 — 1898-99 Grand total 251,793

C. & S. aggregate 1897-98.....103,419	For 1898-99.. 56,707	Decrease..... 46,712			
A. C. L. aggregate 1897-98..... 72,584	For 1898-99.. 83,162		Increase 10,578		
S. C. & G. aggregate 1897-98.....161,245	For 1898-99..105,627	Decrease..... 55,618			
River steamers, aggregate 1897-98. 4,458	For 1898-99.. 5,125		Increase 667		
Various 2,666	For 1898-99.. 1,172	Decrease..... 1,494			
Total.....344,372	251,793	Total decrease..103,829	Total increase..11,245	Making total decrease..92,579	

By railroads, ships and various

	1898. June.	1898. July.	1898. Aug.	1898. Sept.	1898. Oct.	1898. Nov.	1898. Dec.	1899. Jan.	1899. Feb.	1899. Mch.	1899. Apl.	1899. May	1899. Total.
Sail shipments, in long tons.....	900	5,756	7,454	7,975	3,488	705	735	1,396	....	2,244	588	2,866	34,107

Equal to 38,200 short tons.

Total shipments railroads and others outside of regular shipping channels September, 1897, to April, 1898.....344,370
Total shipments railroads and others outside of regular shipping channels September, 1898, to April, 1899.....251,772

Total decrease between the two..... 92,579
Total short tons by sail, including May, as stated above..... 38,200

Making decrease..... 54,379

Grand total by rail, others and vessels, latter includes May, 1899, as above.....289,993 short tons

Charleston, S. C., 26th June, 1899.

(Special Correspondence to the Reporter.)

The Duty on Lysol.

Washington, July 7, 1899.

The Treasury Department is not willing to acquiesce in the recent decision of the Board of General Appraisers, made on protests of the firm of Lehn & Fink, wherein it was held that certain so-called lysol which had been assessed for duty as a chemical compound at 25 per cent. ad valorem under paragraph 3 of the act of July 24, 1897, was properly classifiable as a "coal-tar preparation, not medicinal and not specially provided for at 20 per cent. ad valorem," under paragraph 15 of the same act. Assistant Secretary Spaulding has, therefore, directed the Collector at New York to file an application for review of the decision in accordance with the provisions of section 15 of the act of June 10, 1890. In a letter to the Collector Gen. Spaulding says:

"From the findings of the Board of General Appraisers it appears that the article consists of a small fractional part of tar oil, dissolved in fish oil by boiling, and that it is extensively used as a disinfectant and germicide, and also to some extent as a medicinal preparation.

"It is ,therefore, the opinion of the department that the merchandise cannot be considered a 'coal-tar preparation not specially provided for' within the meaning of paragraph 15 of the act of July 24, 1897, but that it is properly classifiable at the rate of 25 per centum ad valorem as a 'chemical compound' under paragraph 3 of the said act, in harmony with the dissenting opinion filed in G. A. 4468."

Imports and Exports.

Below we give a summary statement of the imports and exports of the United States for the eleven months ending May 31, 1899, compiled by the Bureau of Statistics at Washington. We also give the same information for the corresponding period of last year for comparison:

	1898.	1899.
Alizarine and Alizarine colors, lbs.	5,496,418	4,753,328
Argol, or crude tartar, lbs.	17,204,127	21,439,349
Asphaltum, or bitumen, crude, tons	82,049	59,876
Bark, hemlock, cds.	24,296	15,777
Barks, cinchona or other quinine, lbs.	2,513,039	3,014,269
Bristles, lbs.	1,407,752	1,748,366
Brushes	$678,401	$815,313
Cement, lbs.	737,326,932	743,747,853
Clay of all kinds, tons	96,954	107,553
Coal tar colors and dyes.	$3,352,992	$3,408,461
Cochineal, lbs.	141,648	95,252
Cocoa, crude, etc., lbs.	24,172,425	34,481,134
Cork, mfrs. of	$212,904	$348,423
Corkwood or cork bark, unmanufactured	$1,042,904	$1,064,539
Cutch and gambier, lbs.	39,761,160	35,812,897
Dyewood extracts, etc.	3,836,569	3,002,843
Glass bottles, etc., empty or filled	$308,622	$335,184
Glass, cylinder, crown, etc., unpolished, lbs.	35,308,915	42,968,812
Glass, cylinder and crown, polished, unsilvered, sq. ft.	2,521,190	2,495,452
Glass, cylinder and crown, polished, silvered, sq. ft.	241,664	885
Glass, plate, fluted, rolled or rough, sq. ft.	179,050	219,099
Glass, plate, cast, polished, unsilv'd, sq. ft.	631,865	829,410
Glass, plate, cast, polished, silvered, sq. ft.	519	352
Glue, lbs.	3,458,554	4,874,655
Glycerine, lbs.	11,390,408	13,994,560
Grease, n. e. s.	$558,056	$656,219
Guano, tons	4,441	4,195
Gum, arabic, lbs.	907,745	796,615
Gum, camphor, cde., lbs	1,818,708	1,682,655
Gum, chicle, lbs.	.....	2,018,970
Gum, copal & kauri, lbs	.....	17,589,580
Gums, all other.	$2,423,409	$959,243
Hops, lbs.	2,343,584	1,709,936
Indigo, lbs.	2,894,966	5,037,774
Lead, pigs, bars, etc., lbs	3,261,816	414,023
Lead in ore, lbs.	172,601,577	180,051,219
Licorice root, lbs.	68,984,266	94,372,813
Lime, chloride of, or bleaching powder, lbs.	104,427,243	103,777,844
Linseed or flaxseed, bu.	119,155	61,932
Logwood, tons	42,679	34,672
Other dyewoods	$158,353	$186,533
Mineral waters, all not artificial, gls.	1,355,220	1,375,934
Nutmegs, lbs.	1,081,518	1,469,489
Oil, mineral, gls.	1,227,335	1,616,820
Oil, whale and fish, gls.	667,719	515,530
Oils, other animal, gls.	13,777	9,055
Oils, volatile or essential	$1,379,277	$1,525,102
Oil, olive, gls.	668,421	823,468
Opium, crude, lbs.	99,047	475,052
Opium, prepared, lbs.	82,102	103,714
Paints and colors	$972,967	$1,074,130
Pepper, lbs.	13,003,006	11,332,545
Perfumery, cosmetics, etc	$409,484	$471,110
Phosphate, crude, tons	8,766	111,487
Other fertilizers	$1,173,531	$910,049
Plumbago, tons	9,574	12,401
Potash, chlorate of, lbs.	4,296,025	2,553,974
Potash, muriate of, lbs.	113,242,986	90,457,415
Potash, nitrate of, or saltpeter, crude, lbs.	11,480,186	17,652,547
Potash, all other, lbs.	34,184,793	36,805,395
Quinine, all salts of, oz.	4,085,976	3,507,242
Shellac, lbs.	6,394,309	8,202,187
Soap, fancy, perfumed and all toilet, lbs.	520,199	738,951
Soap, all other	$228,635	$229,078
Soda, ash, lbs.	83,314,190	43,660,066
Soda, caustic, lbs.	27,562,217	17,548,094
Soda, nitrate of, tons	106,837	121,384
Soda, sal, lbs.	8,377,467	3,810,280
Soda, other salts of, lbs.	20,003,024	21,933,111
Sponges	$377,736	$373,475
Sulphur, or brimstone, crude, tons	151,820	117,996
Sulphur ore, tons	.....	267,711
Sumac, ground, lbs.	7,627,355	11,774,280
Vanilla beans, lbs.	56,280	242,861
Zinc, in pigs, lbs.	2,978,469	2,016,274

Exports of Domestic Merchandise.

Acids	$104,348	$194,889
Acetate of lime, lbs.	33,936,740	44,031,556
Alcohol, proof, gls.	1,494,565	1,427,555
Alcohol, wood, gls.	379,775	624,516
Ashes, pot & pearl, lbs.	742,507	730,239
Bark, and extracts of, for tanning	$297,075	$326,812
Beeswax, lbs	143,438	119,900
Candles, lbs	2,849,564	3,186,812
Cement, bbls	46,530	59,564
Copper, sulphate of, lbs.	14,114,498	24,412,171
Cork, mfrs, of	$59,739	$50,023
Cottonseed, lbs	32,484,957	32,846,011
Dyes and dyestuffs	$395,912	$445,136
Flaxseed, bu	257,228	2,830,991
Ginseng, lbs	172,956	191,715
Glass, window	$22,542	$30,514
Glass, all other	$1,089,292	$1,328,577
Glucose, or grape sugar, lbs	173,783,615	211,042,549
Glue, lbs	2,074,201	2,223,425
Grease and all soap stock	$1,756,768	$2,296,069
Gunpowder, lbs	1,070,385	1,417,983
Hops, lbs	16,919,630	20,777,473
Lampblack	$162,856	$179,219
Lard, lbs.	662,193,327	652,821,505
Lead, pigs, bars, etc., lbs	27,729	314,405
Lime, bbls	46,379	68,943
Matches	$75,030	$95,675
Medicines, patent or proprietary	$2,242,684	$2,419,526
Naphthas, including all lighter products, gls.	14,643,392	15,104,888
Oil, cake, cottons'd, lbs.	860,500,019	1,031,477,843
Oil, cake, linseed, lbs.	408,775,945	442,162,672
Oil, corn, gls	2,306,557	2,221,830
Oil, cottonseed, gls.	36,211,759	48,085,627
Oil, fish, gls	584,481	942,298
Oil, illuminating, gls.	751,729,727	651,994,516
Oil, lard, gls	708,078	831,474
Oil, linseed, gls	84,253	97,515
Oil, lubricating, gls	54,185,782	61,926,612
Oil, mineral, crude, gls.	102,177,822	103,069,571
Oil, min. residuum, bbls.	422,308	708,823
Oil, peppermint, lbs.	135,010	101,118
Oil, other essential.	$186,555	$137,839
Oil, whale, gls	74,413	75,341
Oleo oil, lbs.	120,067,167	124,950,563
Oleomargarine, lbs	3,926,044	5,115,911
Paints and colors	$983,884	$1,328,921
Paraffine wax, lbs	141,720,603	161,805,699
Perfumery and cosmetics	$282,771	$289,994
Phosphates, crude, tons.	437,771	758,093
Quicksilver, lbs	937,557	1,019,449
Rosin, bbls	2,045,673	2,397,547
Roots, herbs and barks, n. e. s.	$132,861	$156,249
Soap, toilet or fancy	$255,290	$294,034
Soap, all other, lbs	26,324,485	28,625,914
Spermaceti, lbs	217,007	199,360
Spirits turpentine, gls.	15,474,081	14,245,098
Starch, lbs	64,945,743	102,114,040
Tallow, lbs	70,238,630	99,101,215
Tar, bbls	17,023	35,223
Turpentine & pitch, bbls.	18,243	21,867
Varnish, gls	364,959	402,289
Whalebone, lbs	109,133	127,617
Zinc, oxide of, lbs.	6,396,859	9,151,451

RECENT PROGRESS IN INDUSTRIAL CHEMISTRY—XVIII.

(Conclusion.)

Explosives.

H. Maxim, London, patents the addition of eight or ten per cent. of nitrocellulose soluble in nitroglycerine to the ordinary highly nitrated guncotton. The mixture of this nitrocellulose and nitroglycerine is heated with acetoin in a closed vessel. The object of the nitrocellulose soluble in nitroglycerine is to make the material more plastic, and thus prevent warping and cracking in drying. The grains may be moulded under heat and pressure with much less solvent, and retain the shape of the die in all its geometrical details.

Maxim forms a pulpy guncotton of varying degrees of solubility in a mixture with ether alcohol, and, having obtained sheets of this material, treats them with a weak solvent to such an extent that when pressed together they will adhere and thus may be made into any desired thickness. The density of the explosive may be varied by altering the proportions of the soluble and insoluble nitrated cotton.

W. J. Orsman, Gathurst, patents an explosive for use in coal and other fiery mines. Naphthalene, or some other easily attacked non-nitrated hydrocarbon is chlorinated and mixed cold with ammonium nitrate and nitrobenzine, to produce the explosive. In the explosion hydrochloric acid is produced, which prevents the ignition of the combustible material in the mine. There is an advantage claimed in having the chlorinated compound distinct from the explosive nitro compound.

W. Greaves and E. M. Ham, of Aberaman, Glamorganshire, with the same object in view, add ammonium tartrate, formate or acetate and preferably oxalate, to explosives of the nitroglycerine and guncotton class, in order to render them safe and flameless. The alums, the carbonites of ammonia and soda, the sulphates of ammonia, potash and soda may also be used, though not so effectively as ammonium oxalate. Boracic acid and borax are also suggested.

G. G. Andre, Glenlean, Argyllshire, and C. H. Curtis, London, also patent a safety and flameless explosive which consists of ammonium nitrate, wood meal and starch. A certain amount of potassium nitrate may be used instead of a part of the ammonium nitrate.

C. Mortier, Bilbao, and H. A. Sandon, Portugalate, patent a gunpowder made of trinitocresol 20 parts, potassium nitrate 65 parts, charcoal 9 parts, stearic acid 1 part, for use in pistols, revolvers and sporting pieces, while, for military rifles and cannon, the mixture is trinitrocresol 20 parts, potassium nitrate 70 parts, carbon 8 parts, stearic acid 2 parts. The stearic acid is to give a glaze to the granulated powder, which it does by melting and thus forming a waterproof coating on each grain.

A. Nobel, Paris, patents through A. V. Newton, London, an explosive which will cause a rending rather than a shattering action on coal. It is similar to ordinary gunpowder, but instead of charcoal, dextrin is used, which gives a greater quantity of gas on explosion, at a lower temperature, and hence is less liable to ignite any firedamp. Inert substances, such as sodium bicarbonate, may also be used. One mixture is 100 parts potassium nitrate, 12 parts sulphin, 75 parts dextrin, 40 parts sodium bicarbonate. For safety explosives one object is to have no flame, another to keep the temperature as low as possible, a third to have as little solid residue as possible, especially in any case in which the temperature would be high. It will be noticed that in the different patents mentioned, in which the object has been a safety explosive, one or other of these features has been prominently in view.

A. F. Hargreaves, Roslin, Scotland, patents an improvement in smokeless powder. Skeins or hanks of cotton thread are nitrated, then thoroughly washed and boiled until stable. While still moist a suitable number of threads are twisted into rope, which is then passed through a bath of acetone or contains a solution of the following substances, or some of them: Nitrates of barium, potassium and sodium, and a little starch or gum. The rope is then allowed to cool and passed between rollers to remove the excess of solution. Three ropes are then twisted into a still larger rope, which is thereupon passed through a bath of acetone or acetic ether diluted with ether alcohol, ether, benzine or naphtha. One of the best mixtures is one part acetone to three of benzine. By this means the rope is stiffened without having its fibrous character destroyed. While still wet, it is cut into the required lengths, which thus constitute the powder pellets.

G. Kynoch & Co. and A. T. Cocking, Witton, Warwick, patent a process for drying cordite and for the effectual recovery of the solvent employed in its manufacture. An airtight cylindrical vessel, made of cast iron, is surrounded by a water jacket, which can be kept at any desired temperature. In this vessel are trays upon which the cordite is spread. A vacuum is maintained in the vessel and so the solvent (acetone) still attached to the cordite evaporates and may be recovered.

The same inventors claim a new process for denitrating the acid used in the nitroglycerine manufacture. The waste acid is allowed to flow into hot water. The heat produced by the action decomposes the nitrated bodies and the purified acid is allowed to flow out from the vessel, the proper rate of inflow and outflow being provided for.

Nitronaphthalenes have become of considerable importance since their presence in nitroglycerine renders the latter insensitive to concussion and a small quantity prevents the freezing of dynamite. W. H. Krug and J. E. Blomen have a paper upon the subject of the commercial preparation of the nitronapthalenes in the Journal of the American Chemical Society. In connection with nitroglycerine, the melting point of the nitronaphthalene is a matter of no importance, and it is best to have the most highly nitrated compound, but in the case of picric acid it is necessary to have the melting point below temperature of decomposition of the picric acid, and therefore a less completely nitrated compound is employed. If it is desired to have some of the highly nitrated naphthalene it may be dissolved in mononitronaphthalene, which also dissolves picric acid and nitrocellulose. In the nitration by the action of sulphuric acid and nitric acid the proportions may vary from 1:4 to 2:3, depending upon whether the lower or higher nitro compound is required. The higher the nitration is to be the greater must be the proportion of sulphuric acid in order to use up the water produced the more fully.

A. Luck, Dartford, England, and C. L. Nichols, London, patent a process for incorporating a soluuble salt, such as sodium nitrate, with nitrocellulose in those gunpowders in which nitrocellulose is a main constituent. The dried grains are hardened by treatment with a weak solvent such as ether-alcohol. Afterward the sodium nitrate may be wholly or in part dissolved out by water, the object being to have the grains more or less porous.

It is pretty clearly made out that perfectly pure cellulose thoroughly nitrated is not liable to decomposition with consequent explosion. In view of the occasional explosions that take place spontaneously with guncotton, W. Will and F. Lenze were led to undertake an investigation, of which they give an account in the Berichte der Deutschen Chemischen Gesellschaft. They conjec-

that the explosions might be due to stable nitrated compounds of sugar, so they nitrated various kinds of sugar at zero temperature. The nitrated compounds were in some instances crystallizable; in others they found oily drops. They were usually soluble in acetone, glacial acetic acid and alcohol, insoluble in water and petroleum spirit. Decomposition took place at 50 degrees Centigrade, and at the ordinary temperature when the substance was exposed to sunlight.

Various substances of a basic nature, such as chalk and other carbonates, have been suggested for the purpose of neutralizing the nitrous fumes caused by the decomposition of guncotton, the presence of which gases causes explosion. But it has been found that these substances have a saponifying effect, attacking the compound, the nitrate of cellulose and decomposing it; hence some investigators consider that their use only aggravates the evil. H. Fleming, in the Zeitschrift fur Angewandte Chemie, recommends nitroguandine for the purpose of neutralizing the fumes. He says the substance can be obtained pure; that it has no saponifying action like chalk and sodium carbonate, and that it leaves no ash behind on combustion. Moreover, since the substance itself explodes when heated, it can be mixed with guncotton in larger quantity than chalk or sodium carbonate without interfering with the explosive quality of the guncotton.

A new form of explosive is patented by M. Van Look, Cologne, which does not, however, appear very promising. A cartridge or shell is charged with calcium carbide and water in separate receptacles. The explosion is produced by the breaking of the water vessel, when acetylene gas is produced in great quantity.

Another explosive of interest, though not likely to be more than a curiosity, is coal dust saturated with liquid air in the same way as kieselguhr is soaked with nitroglycerine in dynamite. The mixture detonates with fulminate. With ordinary liquid air the efficiency is not so great as with dynamite, but with a liquid containing 50 or 60 per cent of oxygen a greater efficiency than that of dynamite is obtained.

An improved mixture for fireworks is patented by W. Weiffenback, Stutgart, Germany, and provides a non-dangerous spray of blinding white light. The mixture is composed of 12 parts aluminum filings, 12 parts barium nitrate, 12 parts saltpetre, 2 parts dextrin, 2 parts sulphur and 5 parts gum arabic. The mass may be pressed dry into tubes or made into paste with water and applied to any suitable article.

C. S. Bradley, Avon, N. Y., and C. B. Jacobs, East Orange, N. J., patent improvements in the manufacture of phosphorus from calcium phosphates of any kind. These are mixed with sufficient carbon to combine with all of the oxygen present and to form calcium carbide and subjected to a current of electricity of a power of 25 to 50 kilowatts. Phosphorus and carbon monoxide are formed as well as calcium carbide, and the phosphorus vapors are led into water.

A new compound for matches has been produced by MM. Sevene & Cohen in competition for a reward given by the French government for a substitute for white phosphorus. The igniting material proposed by Sevene and Cohen contains phosphorus sesquisulphide and potassium chlorate. The sesquisulphide is a gray yellowish substance, which is prepared by heating amorphous phosphorus and sulphur. It is very stable, and specimens have been kept by Lemoine for fifteen years without any change. Its latent heat is low and it ignites at 95 degrees C., and can therefore be lighted like ordinary phosphorus. With chlorate of potash the combustion is quiet, while with red phosphorus, which lights only when the temperature is above 200 degrees C., chlorate of potash gives an explosive combustion. The matches have been found to stand transport and to be free from danger in manufacture on a large scale, and are being produced in all the French state match factories. No odor or fume is given off in the process of manufacture of the paste. The poisonous effect is only about one-tenth that of white phosphorous; three and a half grammes (a quantity equal to that contained in 6,000 matches) can be taken into the system without injury.

S. L. Tog and A. S. Karschner, Copenhagen, claim a process for the manufacture of matches without the use of phosphorous, sulphur or paraffin, by dipping splints of wood or pressed cellulose into hot concentrated solutions of chlorate, barium chlorate being most suitable.

Wooden Poles for Petroleum Wells

BY W. WOLSKI.

The importance which the Canadian boring system has acquired in the Galician oil fields—at present 250 wells are being drilled here according to this method—induced me to communicate something about the wooden bore poles which are employed in this system of drilling petroleum wells.

It would, indeed, be useless to show by entering into particulars how important the reliability of the poles is to the advancement of the work, as, on the one side, the durability itself depends; on the other, and this is the most important, the safety of the work. Yet each fracture of the pole forms the beginning of a most serious clogging; but, however, it signifies a great loss of time also. Clearly the claim which one must place on these poles continually increases with the increase of depth, as, also, does the risk which a fracture of itself entails.

The difficulty which opposes itself to the proper estimate of the wooden poles lies chiefly in this, that here one is not engaged with a homogeneous material and also does not possess a satisfactory fulcrun in order to judge the quality of the material a priori. Each driller knows from experience that as long as there are poles, new, smooth poles, apparently without a flaw, frequently split, while those which, through use, are worn half way through, nevertheless outlast all others.

There are several general rules which can serve in some degree as standard in the production and selection of wooden poles. Above all, the somewhat extended productive method, according to which stronger trunks are sawed square into pieces of suitable thickness, and these square pieces are turned and made perfectly round, is positively to be rejected, because the fibre of the wood never runs entirely even, and, subsequently, these are cut through in many places by the saw. A good wooden pole can be obtained only by cleavage. It must come from the lowest part of a young stem, so that, at the most, six to eight poles can be obtained from one trunk. The wood must not be of luxuriant or rapid growth; rather, it must be distinguished by firm structure and dense annual rings, etc. But, likewise, at times, it is not possible to avoid a fatal blunder, even by the most careful observation of all rules. In placing, poles occur in which the wood shows remarkable weakness, and they are sometimes characterized by a somewhat different color, but often it is impossible to recognize them. Knots sometimes appear in the wood, which are by no means detrimental to the durability of the pole, while, on the other hand, other apparently insignificant defects cause a certain fracture of the poles.

Now, after all efforts to find a completely safe criterion for the qualities of the wooden poles, we were left without result and arrived at the conclusion to apply the test of strength to every pole. For this purpose we employ a hydraulic press, which, by a pressure of 14 atm. brings forth a load of thirty tons. The pole at both ends is placed in automatic working check pieces. The thick end draws on the one end, while the other end is united to a dynamometer by a lever, on which the tension of the pole can be released at any time.

The experiments were undertaken with 55 mm. of strong poles, which were produced according to our patent method. This method consists in that young ash trunks are split, worked round with the plane and then steamed, and, in this manner, crooked poles are straightened. From a long set of experiments a series is here quoted:

					Kg.
Pole	No. 1	broke	with a	load of.....	10,700
"	No. 2	"	"	"	15,100
"	No. 3	"	"	"	13,200
"	No. 4	"	"	"	10,700
"	No. 5	"	"	"	7,000
"	No. 6	"	"	"	12,600
"	No. 7	"	"	"	10,700
"	No. 8	"	"	"	16,400
"	No. 9	"	"	"	22,600
"	No. 10	"	"	"	15,800
"	No. 11	"	"	"	9,500
"	No. 12	"	"	"	20,100
"	No. 13	"	"	"	13,900
"	No. 14	"	"	"	18,200
"	No. 15	"	"	"	15,700

The comparison of the above figures demonstrates above all that wooden poles from the same province, and, apparently, identical, nevertheless exhibit, relative to their strength, great individual variations. It is further firmly established that the durability of wooden poles is by no means connected with their external appearance, since apparently beautiful and smooth specimens split with a small load, while others, which one had designated in advance as outcasts, sometimes show a carrying power of 20,000 kg.*

Further experiments show that the heretofore generally used wooden attachments, even when they are so carefully perfected, hold considerably less than the entire pole, since the rivets (10 mm. strong) began to bend through with a strain of 7,000 kg., and the wood was always damaged more and permanently split through in the direction of the mortise.

Upon the basis of the above experiments we are satisfied with all selected poles of load test 12,500 kg.

By this test on an average of eight or ten per cent. of the wooden poles split. This signifies a material loss, which is by far outweighed by the safety of the drilling process, because it is better to let a weaker pole break upon the testing machine than in the bore hole, which loss would entail far different consequences.—Naphta.

*These poles, which have been proved to 12,500 kg., and which are now to be purchased in open market, are characterized by having both ends stained with red aniline color and are easily recognized. For this purpose the dynamometer is adjusted to a constant weight and an electrical signal attached, which instantly advises the workman as soon as the arm with the weight begins to lift, whereupon pressure is released.

The Raschen Process for the Manufacture of Cyanide.*

BY JAMES T. CONROY, B.SC., PH.D.

In session 1895-96 I had the privilege of reading before this Section a paper entitled "Some Experiments Relating to the Manufacture of Cyanides," and in the introductory remarks I drew attention to the growing importance of cyanides, and, on account of this importance, the increased interest taken in the methods of their manufacture. The importance lies in the application of cyanide on the goldfields, and the extent and value of such use has been most clearly shown in a paper read by our President, Mr. Beilby, last Winter, and published in the February number of our Journal for 1898, p. 130. In this paper Mr. Beilby traced the growth of the cyanide process of gold extraction during the ten years of its existence, and stated that in 1897 over 1,215,000 oz. of fine gold, which would otherwise have been lost, were recovered by its means. This quantity was about 10 per cent. of the whole of the gold produced in that year, and there were required for its extraction about 2,600 tons of cyanide. A greatly extended use for this reagent was indicated, since, of the gold so recovered, over 50 per cent. came from the Transvaal, whilst the total gold produced in this district only equaled some 20—25 per cent. of the world's output.

This being the case, any new process for the manufacture of cyanide possessing marked novelty combined with commercial value is worthy the attention of our Society; and to-night I propose to describe a process possessing these attributes, which has been adopted by the United Alkali Company, and is now in operation at their Old Quay Works, Runcorn.

This process starts with ammonia as the source of the nitrogen, finally existing, in combination with carbon, as cyanogen, and, as in a number of the more important proposed processes of the present day, a sulphocyanide is formed as an intermediate product.

Inspection of the formulae of cyanide and sulphocyanide shows at once that the two bodies are very closely related, and it might be expected that, just as potassium cyanide takes up sulphur to form sulphocyanide—a reaction long made use of for the preparation of this substance—so the complete removal of the sulphur from the latter substance should give cyanide. This is found to be the case, and two general methods of removing this sulphur exist, viz., reduction and oxidation. Processes based on the former method I have previously described in some detail (this Journal, 1896, 8, and 1898, 98); the latter method forms the basis of the process I describe to-night.

The change to be effected may be represented by the following simple equation—RCNS + 3O=RCN + SO_2—which shows the thiocyanate converted to cyanide by the oxidation of its sulphur to sulphuric anhydride.

This change appears to be exceedingly simple, and, when the reaction is carried out under suitable conditions, the conversion takes places smoothly in the manner indicated.

Such a simple reaction does not, however, appear to have been the experience of the somewhat numerous body of early investigators, and it is certain that under many conditions the reaction is less simple, and, from the cyanide manufacturers' point of view, altogether undesirable. It may help to a better understanding of the difficulties which had to be faced to bring about the desired oxidation, if I briefly recount what, at the time of this invention, had been done in the oxidation of thiocyanates.

*A paper read at a recent meeting of the Society of Chemical Industry, Liverpool Section.

To judge by the accounts given in the standard works of reference and in text books, it seems to have been the general experience that when solutions of sulphocyanic acid or its salts were oxidized, e. g., by nitric acid or chlorine, a reaction took place in such manner that a compound $C_3N_3HS_3$ was formed. This compound separates from the solution in the form of a yellow flocculent precipitate, and is generally known by the names persulphocyanogen or pseudocyanogen sulphide. This same substance appears also to be produced when the oxidants employed are potassium chlorate or bromine, and, produced by the agency of these latter oxidants, it is introduced into the market as a yellow dye under the name of Canarin. The yield obtainable is said to be 40 per cent. of the theoretical. Other yellow substances have also been produced by the action of chlorine gas on solid potassium sulphocyanide; and so recently as 1898 Goldberg, Siepermann and Flemming have patented the preparation of a dyestuff in this fashion.

The first notice of the oxidation of the sulphur to sulphuric acid appears to have been made by Hadow, who used as oxidants potassium permanganate and peroxides of lead and manganese. Since his time, various chemists have examined this reaction, and it has been shown that, working with permanganate of potash in sulphuric acid solution, the reaction occurs quantitatively in the direction:

$$5KCNS + 6KMnO_4 + 12H_2SO_4 = 5HCN + 6MnSO_4 + 11KHSO_4 + 4H_2O.$$

It has also been shown by Alt (Br. 22, 3258) that the change proceeds in a similar quantitative manner in the presence of barium chloride when nitric acid is used as an oxidizing agent.

There is also another general method of oxidation, apart from purely chemical methods, which is finding extended application at the present time, and which has not been overlooked in this case. I refer to oxidation by electrolysis. Here, again, the experiments of Goppelsroeder and Lidoff led to the production of the same yellow insoluble persulphocyanide, or, if not this, some very similar substance. Oxidation by means of the current appears, however, in other hands, to have led to different results, for I find that in 1888 and 1889 two patents were taken out by Parker and Robinson for the production of hydrocyanic acid by the electrolysis of solutions of sulphocyanic acid or its salts. These patentees give in their specification the most suitable strength of electrolyte and the current density employed. They also state that the second product of the oxidation is sulphuric acid.

The tendency of oxidation would thus appear to be towards the formation of persulphocyanogen, and since this is a decidedly stable substance, remaining undecomposed even in the presence of concentrated nitric acid, the chance of converting, on a commercial scale, sulphocyanide to cyanide by oxidation might appear extremely slight.

The fact, however, had been established that under suitable conditions the oxidation to hydrocyanic acid proceeded in a quantitative manner, and Dr. Raschen applied himself to the problem of effecting this conversation in an economical and commercially applicable manner.

Again reverting to the equation representing the reaction RCNS + 3O = RCN + SO_2, it is seen that for every equivalent of cyanide produced there are consumed six equivalents of oxygen, or, giving weights, 65 parts of KCN would require 48 parts of oxygen. Now, assuming that the reaction could be brought about quantitatively by means of bleaching powder—the cheapest manufactured oxidizing agent—there would be required for every 1 ton of potassium cyanide over 9 tons of bleach, costing about 45l. Such a cost would prove a serious drawback to a process starting from such an expensive raw material as sulphocyanide to manufacture a product selling at 120l. per ton. Dr. Raschen has overcome this by inventing a process of which it might be said that the oxidation is effected, not by any manufactured oxidant, but by the oxygen of the atmosphere. This he does by using nitric acid in starting the process, and then continuing the reaction by means of atmospheric oxygen, absorbed and

rendered active by the reduced nitrogen oxides formed.

Although the process is now successfully worked, the earlier laboratory experiments seemed to foreshadow disappointment, for the addition of nitric acid to potassium sulphocyanide, whether solid or in solution, always gave rise to the persulphocyanogen already mentioned, sometimes with explosive violence. Further work, however, showed that improved results were obtained by working with dilute solutions; and finally, by adding the sulphocyanide solution slowly to boiling dilute nitric acid—that is, keeping the acid in excess instead of, as previously, adding the acid to the sulphocyanide—yields of hydrocyanic acid lying between 96 and 99 per cent. of the theoretical were obtained. Working with the same solutions and quantities, but adding the acid to the sulphocyanide, only gave yields of from 50-60 per cent. The almost theoretical yields above given were obtained both with potassium and calcium sulphocyanides, and almost equally good results were obtained when other oxidizing agents, e. g., manganese peroxide or bichromate of potash in sulphuric acid solution, were employed.

The process is thus applicable to sulphocyanides of alkalis and alkaline earths, and the decomposition is not dependent upon the use of any one particular oxidant.

As carried out at Wigg's Works, sodium sulphocyanide is the salt employed, and the reactions taking place may be represented as follows:

(1.) $NaCNS + 2HNO_3 = HCN + NaHSO_4 + 2NO$ $2NO + 3O + H_2O = 2HNO_3$

The first reaction is carried out in a solution maintained acid by means of sulphuric acid; and the nitric acid required at the start, and subsequently to make up for process losses, is added in the form of sodium nitrate. Sodium sulphocyanide is used in preference to the calcium compound, since this latter salt would, in presence of the sulphuric acid, give rise to a precipitate of calcium sulphate. As the process is worked, continuous operation is rendered comparatively easy, since only liquids and gases have to be dealt with, and the apparatus has been so constructed that while the gases escape in one direction to suitable absorbing vessels, the spent liquors are continually running away in the opposite.

DECOMPOSITION OF THE SULPHOCYANIDE.

The decomposing vessels consist of a series of earthenware jars (1, 2), connected together with pipes of the same material, and so arranged that the liquor overflows from each jar at about the middle of its height to enter near the bottom of the jar next in series. Each jar is fitted with an exit pipe for evolved gases and an inlet for a steam pipe, through which live steam is forced, serving both to heat and to agitate the contents. In addition to these openings the first or leading jar is furnished with inlets for sulphocyanide and nitre solutions, for vitriol, and for the return of the recovered nitric acid and also of the incompletely reduced nitrogen oxides washed out in the scrubber to be subsequently described. The second jar is also fitted to receive the water and dissolved hydrocyanic acid returned from the condensing apparatus. The mode of connection is shown in the accompanying diagram. In starting the process, the jars are filled with dilute acid, and steam is admitted until the temperature is brought to within a few degrees of boiling point. The sulphocyanide solution, containing the equivalent of 10 lb. KCNS per cubic foot, is then run in together with the nitrate solution, and the supply of liquor and steam so regulated that, whilst the temperature is maintained, the liquor running away from the first jar is free from sulphocyanide, and that leaving the last jar of the series is free from hydrocyanic acid. It will thus be seen that, strictly speaking, the first jar is the decomposer proper; the function of the following jars is merely to boil out the various gases produced in the reaction and the hydrocyanic acid returned from the condenser.

In the early days of manufacture this hydrocyanic acid solution was converted directly into alkaline cyanide by neutralizing with caustic liquor; but, working in this manner, the color of the solid cyanide obtained was always dirty, and so the practice was discontinued.

A glance at the thermo-chemistry of the process will not be out of place here, and will no doubt be of interest to many. I have already mentioned that in the laboratory it was seen that under certain conditions the oxidation occurs with almost explosive violence, indicating a strongly exothermic reaction. The oxidation of the sulphocyanic acid to HCN and SO_3 by means of free oxygen would in fact evolve almost as much heat as the combustion of a quantity of free sulphur equal to that contained in the acid. In Raschen's process, however, the heat evolved in the cooling jars is considerably less; we must allow for the heat consumed in the reduction of the nitric acid. The following thermo-chemical equations represent what occurs, the solutions being dilute and the hydrocyanic acid and nitric oxide evolved as gases:

(1) HCNS + 3O = HCN + SO3 in solution.
+ 19.9 + 7.8 + 141 calories evolved. +128.9

(2) N2O5 = N2O2 + 3O in solution.
+ 28.6 − 43.2 calories evolved. − 71.8

Calories evolved from reactions (1) and (2)..... 57.1

Combining (1) and (2) in one equation:

HCNS + N2O5 = HCN + SO3 + N2O2.
19.9 28.6 7.8 141 − 43.2 calories evolved..... 57.1

There is thus a balance of heat of 57 C. per molecule hydrocyanic acid to the good. Notwithstanding this, it is, as we have seen, necessary to supply steam during the process, and the reason for this is apparent when we take into account the steam carried over with the gases and the large volume of spent liquor running away at practically boiling point, since this temperature is necessary to effect the decomposition and expel the hydrocyanic acid. This large volume of spent liquor, practically a solution of bisulphate of soda, is necessitated by the degree of dilution required for correct decomposition; in flowing away it carries with it approximately the whole of the heat generated in this part of the process.

The testing of this spent liquor forms a check on the working of the process; it is examined for sulpho and hydrocyanic and also for nitric acids. It usually runs away quite free from sulphocyanide, but containing traces of HCN. The cyanide lost in this manner is under 1 per cent. Occasionally small quantities of persulphocyanogen are produced, indicating a lack of nitric acid; when this is the case the yellow precipitate may be seen running away in the exit liquor.

The gases generated from the decomposition of the sulphocyanide consist almost wholly of hydrocyanic acid and nitric oxide in the proportion of one volume of the former to two volumes of the later. They contain, however, a small quantity of carbonic anhydride, due to oxidation extending too far, and also nitrogen trioxide corresponding in amount to some 3—5 per cent. of the nitric acid decomposed. Coming from a nearly boiling solution the gases are naturally diluted with a considerable bulk of aqueous vapor or steam, and the next portion of the apparatus is therefore adapted to the removal of the incompletely reduced nitrogen oxides and the steam. The gases leaving the decomposing jars unite in a main, and from these gases the nitrogen trioxide is first removed by causing the gases to pass upwards through a tower or scrubber built of earthenware pipes and packed with flints, and down which a small quantity of water is continually flowing. This water washes out all absorbable nitrogen oxides without materially lowering the temperature of the gases and steam passing through; absorption of hydrocyanic acid at this point is thus avoided. The acid liquor running away from the tower is returned, as before mentioned, to the first decomposing jar.

The steam is next removed, and to effect this the usual method, viz., condensation, is followed. The gases issuing from the top of the scrubber tower are conducted through a main to a condensing apparatus consisting of a number of cast-iron pipes cooled externally by water. In these the main bulk of the steam is condensed. The condensed water naturally dissolves a considerable quantity of hydrocyanic acid, and, as already mentioned, it was originally directly neutralized with alkali in a special vessel. Now, however, it is run back by a special pipe to the second decomposing jar of the series, and in this and the following vessels it is regasified. This running back of the liquor and regasification is therefore equivalent to retaining in the decomposing vessels a certain proportion of the hydrocyanic acid first generated, and allowing the whole of that subsequently produced to reach the alkali in the form of gas. The quantity of hydrocyanic acid washed out in the condenser is about 30 per cent. of the quantity passing through; it flows away in the state of a saturated aqueous solution.

The gases now consist of HCN and NO, their temperature has been reduced from 75 deg.—85 deg. F., and, we may take it, they are saturated with moisture at this temperature. From the condenser they are conducted to the cyanide absorbers, passing through a catch box on the way. These absorbers (A, A^2), are of cast iron, and each is cooled externally by means of a water jacket, a, to prevent decomposition of the cyanide, by the caustic alkali, due to the rise of temperature, which would otherwise result from the heat evolved in absorption. The absorbers are two in number, and are fitted with inlet pipes for the gases and caustic alkali solution, outlet pipes for the nitric oxide, and run-off taps for cyanide liquor; also with gauges (c) to show the level of the liquor. The gas main entering the first absorber reaches almost to the bottom of the vessel; the main leading from the first into the second vessel only dips a few inches below the surface of the caustic liquor, which, when charged, possesses a density of 75 deg. Tw. The gas is allowed to bubble through this solution, and in its passage the hydrocyanic acid is absorbed, whilst the nitric oxide passes forward. Of the hydrocyanic acid over 90 per cent. is absorbed in the first vessel—an unexpected result when one considers the statements usually made as to the feeble acid nature of this gas.

The absorption of the hydrocyanic acid in the caustic alkali solution has to be carefully followed by testing as the point of saturation is approached. In the earlier days of working, a strong discoloration of the finished cyanide liquor was frequently experienced. As already described, a discolored solution always resulted when the hydrocyanic acid solution from the condenser or other aqueous acid was neutralized with caustic alkali, whilst, when the hydrocyanic acid gas was absorbed in alkali directly, the discoloration occurred in some cases and not in others. It was very early found out by observation, that so long as the alkali remained in excess, the solution in the absorbers kept its color, but that so soon as a slight excess of HCN was present, the whole became very quickly brown, and from such a "spoiled batch," it was, generally speaking, impossible to get a white cyanide on evaporation.

It was noticed by v. der Pfordten, in 1885, that when any acid was added to a solution of potassium cyanide in insufficient quantity to decompose the whole of the cyanide, the solution became strongly discolored. The same effect he also found was produced on adding free hydrocyanic acid to a solution of potassium cyanide, especially when the solutions were concentrated and warm. This coloration occurred with the purest cyanide, and he ascribed it to a polymerisation of the hydrocyanic acid in the presence of potassium cyanide. This observation no doubt gives the explanation to our own experience. It certainly emphasizes how necessary it is to watch the completion of the absorption, and to make sure that there is always excess of caustic alkali in the absorber. This is done by testing in the following manner. The sample is titrated with $AgNO_3$ solution for cyanide in the usual fashion, and after the milkiness has appeared a further equal quantity of silver nitrate is run in so as to precipitate all the cyanogen as silver cyanide. Care must be taken not to add too much silver solution, since any excess would react with the caustic alkali present. The solution is then titrated with standard sulphuric acid solution, and the stages at which the colors of phenolphthalein and methyl orange are changed are noted.

The figures usually obtained are 18.6 c.c. for the silver test, 1.4 c.c. for the acid, using phenolphthalein, and 2.7 c.c. using methyl orange. This corresponds to 0.1 c.c. of free caustic. The ratio between the total alkali and alkaline cyanide in the finished batch is also useful in affording a good indication as to what the strength of the finished cyanide should be, and the cyanide test also enables the loss suffered in boiling down to be calculated.

NITRIC ACID RECOVERY.

The nitric oxide vapors which have passed through the caustic liquor without absorption are now ready for reconversion to nitric acid. This reconversion is brought about by passing the gas, mixed with an excess of air, upwards through two stoneware towers, packed with flints, over which water is allowed to flow. The air is first admitted to the nitric oxide close to the base of the first recovery tower. The quantity of water and the volume of air require, naturally, to be carefully regulated in order to ensure the recovered nitric acid to be of uniform strength. An excess of air over the theoretical quantity has been found necessary for cooling purposes, by serving to carry away a portion of the heat generated in the oxidation of the nitric oxide. Using only the theoretical quantity of air, the temperature rises to such an extent as to prevent absorption of N_2O_3 in the first tower, rising in some cases as high as 160 deg.—170 deg. C. Cooling by increasing the quantity of water is undesirable, since it leads to unnecessary dilution of the recovered acid. The mixture of recovered acids leaves the bottom of the tower at about 25 deg. Tw, and flows to the first decomposing jar to oxidize a fresh portion of sulphocyanide.

The removal of the gases from the decomposers and the current through the various towers and absorbing vessels is brought about by the use of a Korting jet. It is also by the acid of this that the air necessary for regeneration of the nitric acid and, ultimately, for the oxidation of the sulphocyanide is drawn from the apparatus.

We have now reached the point where the cyanogen of our original sulphocyanide has been converted to cyanide, an exists as an alkaline cyanide solution in the absorbing vessels, the sulphur of the sulphocyanide has been run away in the form of sulphuric acid or a salt of this acid, and the nitric acid used in effecting this conversion has been recovered and is ready to enter into a similar and fresh cycle of operations.

Having obtained the cyanide in the form of liquor, the next stage is its conversion into the solid marketable state.

In the laboratory this conversion was found to be sufficiently simple. Evaporation of a few litres in a porcelain basin led to the production of a beautifully white product of high strength. Evaporation of the same liquor in bulk in an iron pot gave, unfortunately, quite a different result, the finished product containing only some 30 per cent. KCN and, in the case of one evaporation, nil. Almost all the cyanide had been decomposed during the evaporation to form ammonia. This loss experiment showed was in no way attributable to the difference in the material of the evaporating vessel; it was mainly due to the larger bulk of liquor treated.

In the first of my previous papers I indicated that a serious loss might occur in the evaporation of cyanide liquors, but the greatest loss I had experienced in the laboratory was 13 per cent., the least 3 per cent. Even the higher of these losses is, however, insignificant with those already mentioned and the one shown in detail in the following table, which represents an experiment carried out on 50 litres of liquor in an open enamelled iron vessel heated by a gas fire:—

Time.	° Tw.	Test. Per Cent. KCN.
..	..	82.0
12.30	..	63.7
2.30	15	57.5
3.0	18	53.5
3.30	26	49.6
4.0	36	45.0
4.30	59	45.0
5.0	64	45.0
5.30	74	43.6
6.0	Solid.	33.8
Average sample.....		28.0

This loss is mainly due to the action of superheated steam, imprisoned in the cyanide mass, on the cyanide, the decomposition leading, as above stated, to formation of ammonia. This difficulty has been successfully overcome by boiling down the liquors in steam-jacketed vacuum pans, maintaining during the whole operation a constant agitation or stirring. By this means the water is removed at a lower temperature, the formation of crusts avoided, and decomposition consequently diminished. The actual loss in the vacuum apparatus does not amount to more than 1 per cent.

The finished product forms a white, more or less lumpy powder, and it is entirely free from sulphides—a characteristic which makes it eminently suitable for the gold-extraction process. It naturally contains any impurity originally present in the caustic solution used for absorption, and if any air leakage has occurred, traces of nitrogen acid salts are also present.

Although the process has been now described from start to finish, there still remains a few points of considerable interest and worthy some special attention.

The first of these is that, in this process of manufacturing an article in large demand, the main constituent of the product sought, and also a reduction product of the substance through the agency of which this main constituent is produced, are present during a certain stage in the gaseous form, and both gases are exceedingly danger-

ous to life. Calculation shows that, theoretically, for the production of one ton KCN there are necessary 12,300 cb. ft. of hydrocyanic gas, and, admixed with this, 24,600 cb. ft. of nitric oxide. That is, for every ton of potassium cyanide we have to deal with 37,000 cb. ft. of highly poisonous gases undiluted in any way. To emphasiez this figure I will compare it with those obtaining, theoretically, in the Chance-Claus process for the recovery of sulphur by burning with air the sulphuretted hydrogen generated from alkali waste. The reaction is—

$$SH_2+O = S+H_2O.$$

The volume of pure (100 per cent.) sulphuretted hydrogen gas thus required per ton of sulphur is 23,600 cb. ft., or roughly, about two-thirds of the gases per ton potassium cyanide. Owing to dilution with nitrogen and carbonic anhydride the actual volume of diluted SH_2 becomes very nearly 100,000 cb. ft.

Naturally in desiging a plant to deal with such immense quantities of poisonous gas, special precautions had to be taken, especially as the construction necessitated a large number of connections in pipes, &c. As mentioned early in this paper, the process has been made continuous and the various reagents and their decomposition products are all either gases or liquids. This does way with all necessity for the opening of manlids, &c., and even for their presence, and escape of gas can therefore only occur through breakage or the presence of some leaky joint. The danger of escape through cracks and leaks is, however, reduced to a minimum by working the whole apparatus under a slight vacuum produced by the Korting jet employed to draw the gasses through the various towers, &c.

Any leak would therefore probably mean the drawing of air into the apparatus, and not the escape of gases outwards. Should an escape of gas occur, the fact that the hydrocyanic acid is always present in admixture with nitric oxide, renders such escape at once visible by reason of the deep red color immediately produced when this latter gas comes in contact with air. This is the surest sign and safeguard the men have, that dependent on sight. An additional safeguard is the use of a gas-tight metallic covering encasing securely every part of the apparatus. This covering is made of lead, all joints in which are made by burning. The space between the lead and the various vessels is filled with a mixture of sulphur and sand poured in molten, and which, on setting, practically binds metal and stoneware into one solid wall, free from holes and cracks and almost safe from rupture.

That these precautions are ample, the freedom from accident and the almost complete absence of smell in the decomposing room afford sufficient proof.

The second point is also connected with the gases with which the process has to deal, and arises from the endothermic nature of the nitric oxide.

Our attention was first directed to this by the occurrence of an accident, unfortunately involving the death of a workman, which happened some considerable time after the process had been got into smooth working. The accident was brought about by turning the tap connecting the main from the condenser with the absorbers, an operation necessary when the liquor in the first absorber has become saturated with hydrocyanic acid. The turning of the tap was followed almost immediately by a considerable explosion, which passed backwards into the condenser and shattered a considerable portion of this. The correct explanation was furnished by some experiments of Berthelot on the explosion of endothermic gases, and published in 1881. According to Berthelot these gases, stable under ordinary conditions, and even when strongly heated, or submitted to the action of the electric spark, may be caused to explode when a detonating substance such as fulminating mercury is fired in the vessel containing them. Among the gases on which he experimented were acetylene, cyanogen, arseniuretted hydrogen and nitric oxide.

Before knowing this property of nitric oxide a careful examination had been made of all pipes and other parts in the neighborhood of the explosion, and especially of the valve of the metal tap the turning of which had been the cause of starting the explosive wave.

The metal valve was found to be considerably pitted, no doubt by a slight in-leakage of air, which combined with the nitric oxide and moisture to form acid, and the pipe from the condenser to the tap was lined with a substance which analysis showed contained cyanogen, carbon and nitrates, or allied bodies. This substance was found to be explosive in its nature, but it was only present in small quantity, which was not nearly sufficient to account for the damage done.

Berthelot's observation on the behaviour of nitric oxide, however, gave us a clue, and there is little doubt but that in turning the tap some of this powder was detonated and exploded the nitric oxide, probable combustion of the hydrocyanic acid with the liberated oxygen ensuing, with the result described.

I may here say that a number of experiments were made in the Central Laboratory at Widnes with the view of exploding the gases, evolved from the decomposition of potassium sulphocyanide with nitric acid, by heating and with the electric spark, but all gave negative results. Even with air admixture the spark failed to cause ignition or any diminution in bulk.

From the evidence adduced at the inquest, this seems to have been the first explosion of its kind occurring in a manufacturing operation, it was certainly not dreamed of by Dr. Raschen when the plant for carrying out this process was designed. The experience gained led to modification of the original apparatus. The metal tap has been replaced by stout rubber tubing opened and closed by means of a screw clip, and the gas main to the absorbers is now separated from the condenser by a catch-box, or water-lute, as already described. There is thus no friction to detonate an explosive mixture, and even if explosion did by any chance occur, it would be limited to a small volume of gas.

A further point of interest is connected with the decomposing jars and attaches to the material of which these are made. These jars are exposed continually to the action of dilute nitric acid at a temperature only a few degrees below the boiling point of water. On this account they may not be made entirely of metal and at the present time they are made of stoneware.

Some experiments have, however, been made with cast-iron lined with ebonite, and at first such vessels gave every promise of successfully withstanding wear and tear. Even after considerbale trial the ebonite in the early jars remained practically unattacked. Further experience with a larger number of vessels taught, however, that if the ebonite contained even the slightest pinhole, the acid would work its way through this and quickly eat away the metal covering with liberation of hydrogen, so causing detachment of the ebonite lining and finally leakage and danger. This disadvantage could no doubt be overcome by paying more attention to the making of the ebonite lining. There remains, however, one insuperable objection, namely, the behavior on cooling. In cooling the ebonite contracts much more rapidly than the iron, with the result that it is not only stripped from the metal backing but even split and torn to pieces. There is thus a danger of somewhat expensive vessels being completely ruined whenever for any reason the process is stopped.—Journal Society of Chemical Industry.

(Special Correspondence to the Reporter.)

Chicago Oil Market.

Chicago, July 7, 1899.

But four days were given to trading the past week, the Board of Trade adjourning from Saturday to Wednesday. Prices showed a general decline up to adjournment. July 1 values were 1½@2c. lower than the previous Wednesday for cash seed. September was down 1½c. and October lost ¾c. These declines were made in the face of unfavorable reports from parts of the Northwest, which were having too much rain, and the discovery of migratory mountain locusts near Minneapolis. Ordinarily, these locusts remain in the higher regions, where they breed. When they migrate they leave a path of ruin behind. Old settlers in Minnesota will recall the devastation wrought by these pests twenty-four years ago, when the State paid out $80,000 in bounty for locusts destroyed, besides suffering the loss of millions of bushels of grain. Professor Lugger of the Minnesota State Agricultural College has sounded a note of warning, and says the presence of even a few in any agricultural district may be a menace to the entire neighborhood. There is not enough credit given to this locust story to attract attention as yet, or to influence prices on the new crop. After the long holiday cash flax declined ½c. and futures held steady, as follows:

	June 29.	June 30.	July 1.	July 5.
N. W.	106½	106	104	103½
July	103	101	100½	100
September	97	97½	97½	97½
October	96	96	96¼	96½

The foreign market is strong and all advices regarding foreign crops are confirmatory of a Russian shortage. It is reported to be a fact that some export business has been done here in September and October flax. Arrivals were fairly liberal for this time of year—53 cars, as compared with 28 cars the previous week and 21 cars for the corresponding week last year. The receipts of July 5 cover a period of several days, and although 30 cars arrived the offerings were but 2 cars. The arrivals not being pressed for sale leads to the conclusion they had been bought to arrive or had been sold without having been offered. The receipts were graded as follows:

	N.W.	No. 1.	Rej.	No gde.	Non-Insp.	Ttl. 1899.	Ttl. 1898.
June 29	..	1	2	1	..	4	2
June 30	6	1	..	..	8	15	6
July 1	4	..	..	..	..	4	7
July 5	16	4	1	..	9	30	6
Totals	26	6	3	1	17	53	21

The only feature to the market was the indisposition of the trade to either buy or sell. There was not a single shipment for the week. Last year 33,240 bushels went out. It is a surprise to the trade that there is no more movement in cash flax. Still, the Crescent and the Swanwell mills are the only buyers just now, and they are probably able to meet their requirements with seed bought to arrive. "Your duplicated seed report of two weeks ago was all right," said a Northwestern elevator man to the writer, "but you give the impression that terminal receipts and seed requirements were all that was raised." He stated that 1,500,000 was a very conservative estimate of the amount that goes direct to interior mills for consumption, but does not show up in terminal receipts. Asked as to the amounts in detail that go direct to interior mills, he made the following estimate:

	Probable yearly run. Bushels.
Cedar Rapids	200,000
Fredonia, Kan.	100,000
Omaha	200,000
Sioux City	600,000
Des Moines	400,000
Fargo	200,000
St. Paul	100,000
Decatur, Ill.	50,000
*Ohio mills	50,000
Total	1,900,000

*Seed sent around Chicago.

These figures are based on a two-thirds run for Cedar Rapids and Fredonia, one-half run for Omaha and a full run for Sioux City, Des Moines and Fargo. Besides this, there are from 200,000 to 300,000 bushels seed crushed at San Francisco and Portland, Ore., which must be considered in the total raised crop. This year, by reason of favorable freight rates, 100,000 of that seed was supplied by Duluth, but it was an unusual condition. Then, too, there is more or less difference of opinion as to the amount of seed per acre. Some argue that one-half bushel is all that is required, while not a few of the most practical flax raisers say they use three-quarters of a bushel, and know of many raisers who use a full bushel. Estimating the amount reserved for seed as three-quarters of a bushel per acre, and taking 1,800,000 acres as a basis, there would be a seed requirement of 1,350,000 bushels. The grand total of all seed from the present crop would then read:

	Bushels.
Terminal receipts to July 1 (less duplications)	15,000,000
Direct to interior mills from country	1,500,000
Pacific coast mills	200,000
Seed requirements	1,350,000
Grand total for crop	18,050,000

The amount to come forward between now and August is too small to in any way affect this estimate. Some interesting deductions may be made from these figures. Subtract the exports, say 2,700,000 (which include seed shipped to Canada and Manitoba) from the seed available for consumption (16,700,000 bushels) and 14,000,000 bushels are left to meet the home demand. From this deduct the possibly 1,000,000 bushels that will be carried over into the next crop, and but 13,000,00 bushels, plus the amount carried over last year, is left for United States crushers. It was estimated 2,000,000 bushels seed and oil was brought forward to this crop, which would give the consumption of the country for this year as 15,000,000 bushels. It should be borne in mind that the season, from an oil standpoint, has been a remarkable one, so it is probable the average yearly requirements of the country for crushing purposes will fall somewhat below this 15,000,000 bushels. The size of the growing crop can only be guessed at, but it is safe to say that any excess above 15,000,000 could be spared for export. The receipts at Chicago for the month of June were but 54 per cent. of those for the corresponding month in 1898—being 121,220 and 224,143 bushels for the respective years. This is due to the receipt of 107,000 bushels by lake a year ago, while this year there were no lake receipts for that month. The June movement, as reported by Registrar Stevens, was as follows:

RECEIPTS.

	N.W.	No. 1.	Rej.
June, 1899	46,400	20,300	9,280
June, 1898	196,593	24,360	2,900
Decrease	150,193	4,060	*6,380

	No Gde.	Non-Insp.	Total.
June, 1899	4,060	41,180	121,220
June, 1898	290	.....	224,143
Decrease	*3,770	*41,180	†102,923

SHIPMENTS.

	N.W.	No. 1.	Non-Insp.	Total.
June, 1899	.....	44,782	12,423	57,205
June, 1898	64,751	186,433	.....	251,184
Decrease	64,751	141,651	*12,423	†193,879

*Increase. †Net decrease.

The amounts in store in regular elevators at Chicago July 1, by grades, with comparisons with the previous week and the corresponding week last year, were as follows:

	N.W.	No. 1.	Rej.	No Gde.	Total.
July 1	25,078	622,747	38,665	9,228	695,718
June 24	32,078	618,464	41,665	9,228	701,435
Decrease	7,000	*4,283	3,000	....	†5,717
July 2,'98	313,224	755,580	37	2,629	1,071,470
June 25,'98	309,610	786,335	37	2,629	1,098,611
Decrease	*3,614	30,755	..	....	27,141

DULUTH.—Opening and closing prices were the same, at $1 for cash, with September 97c. and October 96c. These prices show a decline of 1c. in September and 1½c. in October, compared with last week's close. Arrivals were 73 cars, with 29 at Minneapolis. The market was extremely dull.

LINSEED OIL.—One hardly knows what price to give on oil this week. One crusher says it ranges from 36c. to 40c., according to point; another says it is sold at 35c., and we hear of oil being offered at 34c. for July and August deliveries. Nominally, 35c. would be a fair quotation. The asking price seems to depend a good deal on circumstances, and, while covering a wider range, is practically unchanged from a week ago.

OIL CAKE.—The production is small and the demand light. Crushers ask $22, and it is said sales were made on that basis. Cables are on a basis of $20.25, which is believed by exporters to be as far below the market as the crushers' views are above it. It is thought quite a little might be worked at $21 if the cake was to be had.

OLEO OIL.—The sales of oleo at Rotterdam last week exceeded the exports, and, as stocks were light, prices were fully maintained. Shipments are the lightest in several weeks, and sales the largest. The demand is quite brisk at Rotterdam. Local market quiet. Sales were made of 5,700 tierces, against 4,000 the previous week. Stocks, 1,500, as compared with 1,200 the week before, and exports 5,000 the past week and 5,700 the week previous. The oleo market is a rather peculiar one to gauge just now. The support comes from the large churners themselves, who are fairly well supplied and are not inclined to let the "little fellows" secure stock at lower prices than they themselves paid. Neutral is quiet but firmer, in sympathy with hog product. The close was 46 florins at Rotterdam and the local price 8c.

LARD.—The hogs coming on the market are of good quality and receipts are larger than a year ago. The production of lard is large, and stocks show an increase, but under an improved foreign demand the market is a little stronger than a week ago. There is no outside interest in the speculation market, and the range of prices for the week has been narrow. The close was $5.07½, against a close of $5 a week ago. Loose closed at $4.70. Shipments from Chicago were 24,500 tierces, as compared with 29,000 last week.

TALLOW.—There was a rather easier feeling in the tallow market, but no material change in values. Buyers were not anxious for round lots of prime packers, and lack of demand restricted trade in that grade. The offerings were larger, several lots being presented at 4¾c., but buyers' views were unchanged from a week ago at 4⅝c. There was little home demand. Packers No. 1 and city renderers sold

freely for export. Closing prices were: Prime packers, 4¾c. asked; No. 1 country, 4⅜c.; B, 4⅛@4⅜c.; No. 2, 3¾@4¼c.; city renderers, 4@4 1-16c. Cattle receipts were liberal, 56,784 head, against 46,227 a year ago.

STEARINES.—Stocks of oleo stearine are light, and values about ⅛c. higher, with a small lot sold at 6c., though more could be had at the same price. Tallow stearine is a trifle easier at 4⅞c. Mutton stearine is being held close to oleo prices, and is quotably 5⅞@6c. Grease stearine, 4¼c.

GREASES.—Unchanged and fairly steady. Prime white, 3¾c.; B, 3⅝@3½c.; yellow, 3¼@3⅜c.; brown, 3⅛@3¼c.; bone, 3¾c.; house, 3⅜c.

LUBRICATING OILS.—XLVIII.

OILS USED IN IRON, BRASS AND METAL FOUNDRIES.

The metal foundries were poor customers of oil men up to within the past few years. The fuel for crucible furnaces consisted chiefly of coke or coal, and most of the machinery of the old fashioned foundry was of such character that its lubrication was of small moment. There were a few power pumps, an engine, some driving shafts and a number of sand-sifting machines in use in each factory, all of which consumed small quantities of lubricating oils on the bearings; but outside of this, nearly all of the metal working operations were performed by hand labor, and the oil agent found the average foundry a small purchaser. A little cylinder oil for the engine and a cask of grease would serve all purposes of lubrication for a year or more. Consequently it did not pay oil men to devote much time or energy to the iron foundries. As the conditions have changed very materially for the better during the past five or ten years, it may interest oil agents to refer to the subject. Three factors have combined to develop a demand for oils in metal foundries. The one that is at present attracting the most interest among oil men is the use of liquid fuel crucible furnaces, in which fuel oils are employed for iron, brass or other metal melting at high temperatures, instead of coke or coal fuels. Another factor of even greater importance so far as oil consumption is concerned, results from the increasing introduction of automatic devices for performing the work heretofore done by manual labor. Every time a new machine is substituted for a crude, man-power device in the foundry, just so many additional bearings demand lubrication. As iron founders have purchased and installed improved labor-saving machinery to an extraordinary degree lately, a very profitable and important market for machine oils has resulted. It is profitable from the fact that the nature of the surroundings of the machinery in foundries requires that the lubricating oils be freely used. Dust, sand grit, dampness and other conditions demand that machine journals be oiled often and liberally, and this of course consumes oil. The other factor that has tended to increase the demand for oils, waxes and certain kinds of greases in the metal casting works is due to the invention of new metals and the unlimited demand which has recently come into vogue for soft metal ornaments for stoves, car trimmings, building fixtures and nickel plated artistic small wares in general. The facings of the molds for certain descriptions of ornamental work require finishing with grease or wax mixtures. As to the new metals, these are usually of the aluminum class.

Glass for bushings for small boxes of light machinery is another substance which is being cast in foundries, and the facings of the molds have to be finished with a compound of Japan wax, glycerine and tallow.

OIL FUEL FOR CRUCIBLE FURNACE.

Oil agents who canvass manufacturing districts should not overlook the metal foundries for the reasons stated above. Samples of fuel oils should be carried for foundry use, also machinery oils, and oils, waxes and greases for facings of sand molds. As to the oil fuel furnaces, these are usually erected on the principle of the one shown in figure 1, in which the main oil supply is kept in an overhead tank or cylinder b. The supply in this tank is for immediate use of the burners, and the oil reservoir for holding the oil in large quantities is outside the building, usually buried beneath the earth several feet, where it is practically fireproof. The kind of oil used is chiefly crude petroleum. From the secondary supply tank b the oil is drawn to the filtering cylinder, where a foreign matter is sifted out by passing the oil through wire mesh. The oil falls by gravity through the pipe c and out of the nozzle into the chamber e. The flow of the oil is governed by the globe valve in the pipe. Directly beneath the turned-down nozzle is the air blast pipe d, which sends a blast of air against the falling stream of oil, breaking it and scattering the oil particles about in the combustion chamber, where they vaporize and take fire. The resulting discharges of flame are intensely hot, and the gases generated, together with much of the flame, pass through orifices and circulate about the crucible g in the heating chamber f. The contents of the crucible are quickly melted under the influence of the hot gases and surrounding flames.

LUBRICATION OF SAND SIFTERS.

Sand sifting devices are an important element in the modern foundry, and the continual motion of sifting to which the lubricating bearings of these machines are subject calls for special notice. Not

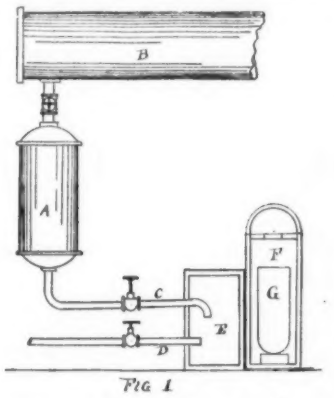

Fig 1

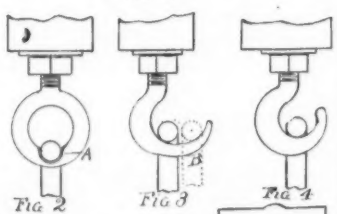

Fig 2 Fig 3

Fig 4

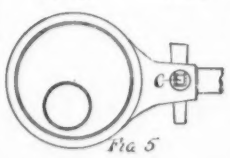

Fig 5

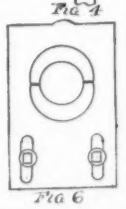
Fig 6

long ago the sand for mold making was sifted by throwing the sand with shovels against wire screens of different mesh. Little later crank handles were used with sieved bottoms, and hand power propelled the cradle to and fro on suspended links and hooks. At the present time mechanical sand sifters are employed in all up to date foundries, and as anything mechanical is usually provided with bearing surfaces that need oiling, we will briefly consider the lubrication of these machines. The modern self-acting sand sifter is planned after the original types, consisting of a suspended cradle, and the latter is rocked mechanically, sometimes by a crank and arm, again by an eccentric. The method of hanging the cradle should be examined by the oil agent. In one foundry the foreman and superintendent claimed that they never oiled the hooks and hanging arms of the cradles of the sifters. An examination showed the result of this saving in oil to be most destructive to the machine, while power was unnecessarily wasted and a rasping sound was made by the dry parts grating in a place worn as at f, figure 2, by the cradle arm bearing on the dry hook. A little oil or fat regularly used between these bearing surfaces would have prevented this defect. New hooks were provided and the parts are now regularly oiled. Again, I have found that the supporting hooks are too soft or too small for the weight, resulting in the hook being drawn down and the arm shifting out to b, figure 3. Lubrication cannot help this, and the only remedy is to have hooks of larger proportions and stronger metal used. Figure 4 is a good design for these hooks, as the back and lower portion is very powerful and will not draw out under ordinary pressure. Such patterns of hooks well oiled where the arm bears will give good and long service without renewal.

ECCENTRIC SHOULD BE REGULARLY OILED.

Figure 5 is the design of eccentric cam and strap rod usually employed on sand sifting apparatus. If any sand gets under the strap and grates on the cam, considerable trouble will result. Before applying any oil to the strap, the bearing surfaces should be cleaned of all foreign gritty stuff, as often these hard, sharp, diamond-pointed pieces of sand will cut like a tool into the metal and groove it. But the most frequent difficulty with these rods is the loosening of the strap key, which holds the rod to the strap. The constant shifting motion causes the key to work loose. As soon as this happens, the entire mechanism is put out of alignment and the process of lubrication made difficult. The best oils obtainable could not evenly lubricate the cam. The only way to fix this is to have a hole bored in the shoulder of the strap at c, tap it with a thread and put in a set screw, the point of which should bear upon the loose key and hold the latter securely in its place.

The usual form of the bearings of the sifters is presented in figure 6. The bushings should be examined and if worn tapering, or if in any way deflected from alignment, they should be rebabbitted or entirely new sleeves substituted, as the tendency for loose sand to work into open or worn spaces of box bearings of sanding machines is very great.

MAY BE NECESSARY TO CUT PIPE.

In one foundry visited by the writer, one of the oil feed pipes to a heavy machine was in bad condition near its feed end, and the oil flow was retarded. It was necessary to cut off the end of the pipe from the inside, which was down, as in figure 7, by using a home-made cutting edge c pivoted on a brace piece a at b and balanced at d to a lever e. This lever was studded to

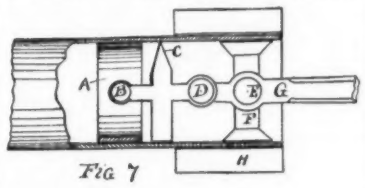

Fig 7

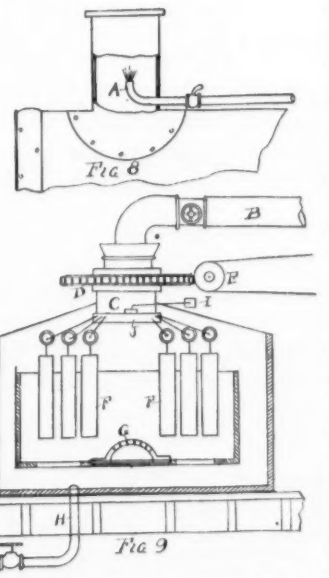

Fig 8 Fig 9

LUBRICATING OILS AND GREASES AND METAL CASTING OPERATIONS.

the cross piece f and the latter was braced by means of the pieces h which fitted over the end of the pipe. The pipe was then turned and pressure put on the lever g which forced the cutting edge c into the metal, gradually cutting off the pipe at that point.

BLOWING OUT PIPES.

In figure 8 is a good method for blowing out oil feed pipes with a steam jet from a smaller pipe. The jet pipe is joined into the main pipe and the nozzle turned up in the middle as at a. Whenever the pipe needs clearing out, the steam charge is admitted and the jet of steam saturates all foreign matter present, loosens it and finally blows it from the pipe, leaving the pipe clear.

ELECTROLYTIC DEVICE.

The electrolytic device shown in figure 9 was recently noticed by the writer in a foundry where it was used for treating soda and chlorine in the plating department. The vat itself is iron, resting on the floor, and is fitted with an interior apartment with a hooded section at g. The carbon cylinders f, f, are joined electrically with the metal ring j and brush i. When the electrical currents are sent through these connections to the carbon cylinders and to a surface of mercury below the inner section, the chlorine is given off at the surface of the carbon poles, is carried through the shell c and out through the pipe b to the bleaching powder chambers. The method of turning the device for agitating purposes is performed by means of the belt and worm wheel f which operates in the gear d. The drainage pipe is at h and runs through the floor as shown.

The pipes for carrying the brine and caustic solutions into the device are connected at the back and are not shown in the cut.

(To be Continued.)

Petroleum Trade of Yokohama.

The British consul at Yokohama, Japan, makes the following report on the petroleum trade of his consular district:

There was a decrease in the import of kerosene oil to the extent of 900,252 gallons. The total deliveries were:

	Quantity.
American	1,572,730
Russian	1,107,551
Langkat	135,207
Total cases	2,815,488

The deliveries of American oil thus show a decrease of 107,061 cases, Russian oil of 27,606 cases, while Langkat oil shows an increase of 86,305. Toward the end of the year Langkat oil ceased to arrive, owing, it is said, to a falling off in supplies at Langkat.

The native oil produced in the Echigo district continues to increase, while some improvements have been made by the introduction of foreign machinery for both pumping and refining the oil. The output is now estimated at from 600,000 to 700,000 cases per annum. It is reported that some very rich wells have recently been struck which will largely augment the quantity for sale, but will hardly be sufficient to seriously interfere with the sale of the imported article.

Tank wagons have commenced to run on some of the railways for the conveyance of oil in bulk, and tanks have been erected at Hiroshima, Okayama, Osaka, Kyoto and Nagoya, in or near the railway compounds for the reception of the oil, and furtner installations are in course of preparation.

Liquid fuel or crude petroleum has made its appearance in small sample lots, and will be largely imported from Dutch Borneo when the tanks for its reception are completed. This article is in time expected to become an important competitor with coal. The trials made on the locomotives of several railways were reported to be most satisfactory.

There has been a gradual rise in prices throughout the year, and with the exception of one or two short-lived declines the tendency has throughout been upwards, an advance of 20 to 25 sen (4d. to 6d.) per case having been established.

The Glorious Sapphire Country.

Along the sunny southern slopes and table land of the Blue Ridge Mountains in western North Carolina, at an average altitude of 3,000 feet, is a country full of delightful surprises to the tourist, sportsman and health seeker. No State or region in the Union contains so many clear, cold and wonderful picturesque streams so many grand water falls, such wide sweeping mountain views and such beautiful lakes. All who visit these lakes are impressed with the wonderful beauty and greatly varied character of the scenery. Recently a new and elegant hotel has been completed, and in connection a large number of cottages, which is known as the Sapphire Inn and Cottages. The accommodations are satisfactory. The grounds are spacious and well kept. There is an excellent livery in connection with the house, and a number of pleasure boats have been placed on Sapphire Lake. The fishing is unsurpassed. The Sapphire country is destined to be the most popular health resort in America. To forester, botanist and geologist, this country is a veritable storehouse of wonders. In the spring and summer hundreds of bright colored flowers light up the old woods; here rhododendrons grow to a height of thirty feet; the air is fragrant with perfume. The globe offers no greater natural sanitarium than here, where every breath, charged with ozone, develops pounds of energy, and where all the conditions for perfect health exist in the highest degree. On the very hottest day in the summer the thermometer has never registered 87 degrees, while a record of the temperature kept for the past four years shows it to be an average of 69 degrees for the entire summer. Visitors from the Norht and East can reach Sapphire via Washington and the Southern Railway & Stage Line. For full particulars call on or address Alex. S. Thweatt, Eastern Passenger Agent, 271 Broadway, New York. ***

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Economy in Cotton Baling.

Twenty-five years have done a good deal in the way of improving the Southern cotton bale, but previous progress has all been discounted by what has been accomplished within the past two or three years by the Lowry press. The Lowry bale, both in its form and in the principle involved in producing it, is a distinct and radical departure from all of the traditions of baling fibres. In form the bale is 36 inches long by 18 inches in diameter, and its density is 47 pounds to the cubic foot, as compared with a density of about 12½ pounds in the old plantation bale. The saving in space either on shipments or storage of the cotton is a very large item, and one which will result in getting a better rate on cotton from the inland as well as the ocean transportation companies. In addition to this, the superior condition in which the cotton is delivered to spinners will give it an advantage in price over the old form of bale. The recent fire tests at Boston showed the Lowry bale to be less hazardous than any other form of bale, and it is expected that lower insurance rates on cotton will follow these experiments. The Lowry press occupies but 10x6 feet of floor space, and requires less than 15 horse power to operate. Planters and ginners who contemplate adding this improvement to their gins will find in the card of the Planters' Compress Company, on another page of this issue, a list of the territorial agencies from which all desired information can be obtained.

Egg Albumen.

BY THOMAS B. OSBORNE.

Hopkins has recently shown that the crystallization of egg albumin is greatly facilitated by the addition of acetic acid to the half saturated ammonium sulphate solution. I have found that crystallization is thus promoted, because the crystallized egg albumin is a compound of the protein substance with acid.

When egg white is first mixed with half saturated ammonium sulphate solution an alkaline reaction towards litmus can be detected and a decided odor of free ammonia develops. After this solution has stood for some hours, all evidence of free ammonia disappears and the solution is then perfectly neutral litmus and continues neutral during the gradual separation of the albumin. The deposited substance, whether in the form of spheroids or of crystals, when filtered out and dissolved in water, reacts distinctly acid with litmus, as well as with phenolphthalein.

In order to obtain the albumin in crystals, it has heretofore been necessary to precipitate it several times, evidently because, during the early evaporations, an insufficient amount of acid is formed to produce the crystalline compound. It is also for this reason that, if acetic acid be added as Hopkins directs, the albumin is obtained completely crystallized by a single precipitation, and that, too, without any concentration by evaporation.

I have found that if, instead of acetic acid, a molecularly equivalent quantity of hydrochloric acid be added, the separation takes place even more quickly and, so far as my experience has yet gone, within a short time is more complete than with acetic acid during the same time. Thus, I prepared from two portions of 1500 cc. each of perfectly fresh egg white a quantity of crystallized egg albumin by aid of each of these acids, the following results:

After adding to one-half of the egg white, acetic acid in the proportion and manner directed by Hopkins, and a molecularly equivalent quantity of hydrochloric acid mixed with 300 cc. of half-saturated ammonium sulphate solution to the other half, the two solutions were set aside to deposit albumin. After three hours a very large crystalline precipitate had separated in the portion with hydrochloric acid. This precipitate was then filtered out, but the portion with acetic acid was allowed to stand for twenty-four hours, because the separation appeared to be much less than that in the hydrochloric solution.

These two precipitates were each twice recrystallized, freed as completely as possible from mother-liquor, by pressing out with filter paper, dissolved in water, and the solutions dialyzed for ten days, until wholly freed from sulphate, when they were filtered clear and evaporated at about 50 degrees. The residue left by the acetic acid solution, A.1, weighed twenty-nine grains; that from the hydrochloric acid, H.1 fifty-nine grams.

The filtrates from the several crystallizations of these two preparations yielded a second crop of completely crystallized albumin; that from the acetic acid solution, A.2, weighing forty-three grams; that from the hydrochloric acid solution, H.2, seven and nine-tenths grams. Similarly, from the mother-liquors from these preparations, two other entirely crystalline products were obtained, weighing respectively, A.3, eight grams and H.3, four and nine-tenths grams. From the finally remainding acetic acid solutions another preparation separated, consisting wholly of spheroids, A.4, which weighed nine and one-tenth grams.

There were thus secured from 1500 cc. of egg white, by adding acetic acid, 80 grams of wholly crystallized albumin, and from 1500 cc., with hydrochloric acid, 73.2 grams, or 5.30 and 4.90 grams respectively per cubic centimeter of egg white.

The crystallized albumin, like all the other protein preparations which I have as yet examined, is a compound of a protein substance with an acid. In order to neutralize to litmus and to phenolphthalein the solutions of one gram of each of these preparations of albumin, it was necessary to add the following quantities of decinormal potassium hydroxide solution:

	A.1.	A.2.	A.3.	A.4.	H.1.	H.2.	H.3.
To phenolphthalein	2.05	2.30	2.30	2.35	2.05	2.25	2.20
To litmus	1.30	1.60	1.65	1.55	1.30	1.60	1.50
Difference	0.75	0.70	0.65	0.80	0.75	0.65	0.70

If, as pointed out in another paper, the molecular weight of the protein substance is about 15,000,* one gram would react with 0.67 cc. of a decinormal solution, a quantity nearly equal to the difference in acidity shown by these two indicators. Three molecules of acid reacting with one of albumin would be equal to two cc. of decinormal solution per gram of albumin, a quantity in very close agreement with that found for the two fractions constituting the greater part of all the albumin, A.1, and H.1, and which also differs but little from that required to neutralize one gram of all the other fractions.

When the albumin, dissolved in water, was neutralized with decinormal potassium hydroxide, the solution evaporated to dryness and the proteid matter burned off, an ash was left containing potassium carbonate almost molecularly equivalent to the acid of the albumin originally neutralized. From this it appears that the acid is mostly, if not wholly, organic.

It has been, thus far, impossible to discover what acid or acids were united to the albumin. Neutralization of the albumin suspended in fifty per cent. alcohol resulted in the formation of a gummy mass difficult to filter and wash, and from which none of the products of neutralization could be separated. Neutralization of a solution of ten grams of the albumin and dialysis in distilled water, failed to give enough salts in the diffusate to shed light on the nature of the acid. Neutralization with baryta of a solution of two grams of the albumin gave a very slight precipitate, which after standing some days, was filtered out, washed and ignited, but only four miligrams of mineral water were obtained.

The preparations showed no excess of sulphur over that usually found in coagulated and thoroughly washed albumin prepared without the use of sulphuric acid or sulphates. Determination of total phosphorus showed A.1 and H.1 to contain 0.38 and 0.40 per cent. phosphorus pentoxide respectively. These preparations contained 0.87 and 0.69 per cent. of ash which was almost wholly insoluble in water and appeared to consist chiefly of calcium phosphate. The total phosphorus in these preparations was equal to 0.59 and 0.64 per cent. of tricalcium phosphate respectively.

Towards lacmoid these preparations reacted alkaline, about one cc. of decinormal acid being required to neutralize the solution of one gram, and three cc. to give an acid reaction. When one gram was treated with decinormal hydrochloric acid no evidence of free acid was shown with tropaeolin, until eight or nine cc. were added.

When pure water solutions containing 2 5-10 per cent. of my albumin preparations were heated they all became turbid at 58 to 59 degrees, and separated a minute quantity of flocks at 59 to 60 degrees. On gradually raising the temperature the coagulum slowly increased, until at 70 degrees much of the dissolved albumin had coagulated. The solutions heated for some time at 74 degrees and filtered still contained a little proteid which even on heating at 90 degrees did not separate until some salt was added. No break in this gradual coagulation of the albumin was detected, the solutions when filtered after partial coagulation yielding a coagulum on again heating up to the temperature to which they had been developed at previously heated.

When solutions of pure 10 per cent. sodium chloride brine containing 2½ per cent. of each of these preparations except A.3, H.3 and A.4 were slowly heated, turbidity developed at 56 to 59 degrees and flocks at 56 to 60 degrees.

Only a trace of coagulum was obtained, however, below 64 degrees, and the solutions filtered from this remained perfectly clear until heated to nearly or quite 70 degrees, when the albumin began to coagulate. It was, however, found necessary to heat the solution to nearly 84 degrees before most of it was separated.

The three preparations, A.3, H.3, and A.4, behaved as just described, except that below 64 degrees each yielded a relatively considerable coagulum. These preparations, it is to be noted, are final fractions obtained in small quantity and it seems probable that this coagulum obtained at 60 deg.-64 deg. is due to the presence of a different substance from that constituting the chief part of the other fractions. This is the more probable as A.3 and A.4 also showed a difference in specific rotation, as well as in composition.

The degree of acidity was found to have much influence on the coagulation of the albumin. Exact neutralization to phenolphthalein, as might be expected, entirely prevented coagulation, even on boiling. When the acid of the albumin was neutralized so that the acidity was equal to one and two-tenths cc. of decinormal solution per gram of albumin, a solution containing two and five-tenths per cent. of the proteid became slightly opalescent on heating to 72 deg. and remained otherwise unchanged, even after heating for a long time in a boiling water-bath. If, however, the acidity was but one-tenth cc. greater, that is, equal to one and three-tenths cc. per gram of albumin, the solution became turbid at 70 deg., and very opaque after heating in the water-bath at 99 deg. The difference between the two solutions was marked and it is evident that the additional one-tenth cc. had caused a change in the condition of the albumin. An acidity of 1.33 cc. per gram is almost exactly equal to two molecules of acid per molecule of albumin, assuming the latter to have a molecular weight of 15,000. From this it would seem to be necessary to add three molecules of acid to one of albumin, in order to form the coagulable substance.

The specific rotation of these preparations was approximately determined by means of a Schmidt and Haensch polarimeter using a 200 mm. tube. The readings on the sugar scale were converted into degrees of circular polarization by multiplying by 0.346.

The results obtained were as follows:

Preparation.	Per cent of dissolved albumin.	Solvent.	Rotation.	Average.
A.1	5.861	Water	−29° 48′	−29° 17′
A.1	6.670	"	−28° 46′	−29° 17′
A.2	3.422	"		−29° 25′
A.3	3.273	"		−33° 3′
A.4	3.404	"		−41° 45′
H.1	3.425	10% NaCl	−29° 0′	
H.1	3.237	Water	−28° 33′	−28° 35′
H.1	6.478	"	−28° 1′	
H.2	1.699	"		−28° 14′
H.3	3.205	"		−39° 31′

As the results obtained on A.1, A.2, H.1 and H.2, agree closely and as these preparations represent very different proportions of the total albumin of the egg white, it seems probable that we have in these fractions but one substance.

Hondzynski and Zoja, working with solutions containing ammonium sulphate, obtained similar but somewhat lower figures, for the specific rotation of their least soluble fractions; namely, 25 deg. 8 min. and 26 deg. 2 min., duplicate determinations on the same fraction. Two other fractions gave them 34 deg. 18 min. and 42 deg. 54 min., figures agreeing fairly with those obtained by me for my more soluble fractions. They determined the albumin in the polarized solution by coagulation, a process which does not admit of so exact a determination of the dissolved albumin as that employed by me, which consisted simply in evaporating the pure water solution to dryness, drying to constant weight at 110 deg. and deducting ash. A slight error in determining the dissolved albumin causes a considerable error in the specific rotation.

The effect of acid alkali on the rotation of the albumin solutions is shown by the following results, obtained by dissolving one gram of A.2 in twenty-five cc. of water and treating with the given quantities of acid or of alkali:

1 gram A.2 + nothing		−29° 17′
+ 0.8 cc.	N/10 HCl	−29° 5′
+ 8.0 cc.	"	−33° 46′
+ 1.4 cc.	N/10 KOH	−28° 45′
+ 2.7 cc.	"	−30° 20′
+ 4.2 cc.	"	−32° 30′

It is to be noted that by eight cc. of the acid and by four and two-tenths cc. of the alkali a rotation was produced about ten per cent. higher than with the smaller quantities of acid or alkali.

This increase may well be due to a local overreaction taking place on mixing the acid and alkali with the proteid solution, it having been demon-

(Continued on page 34.)

*Sabanejeff: Chem. Centrbl. (1891), 10, found the molecular weight of purified egg albumin by determining the lowering of the freezing-point to be 15,000.

FOREIGN MAILS

The following table gives the date and time of closing the mails for foreign countries at the New York Postoffice. A star indicates that letters may be addressed per steamer named for the countries indicated. A dagger indicates that registered mails close at 6 p. m. on the previous day. In case of mails via steamers from Pacific ports the hour of closing is up to the date specified.

After the closing of the supplementary transatlantic mails named below additional supplementary mails are opened on the piers of the American, English, French and German steamers and remain open until within ten minutes of the hour of sailing of steamer.

Mails for—	Steamer.	Date.	Mails close at P. O. Regular.	Suppl.
Porto Rico	Arkadia	July 11..	1 p. m..	—
Inagua and Haiti	Daggey	July 11..	1 p. m..	—
Jamaica	From Phila	July 11..	10 p. m..	—
Europe, via Liverpool	Cymric	July 11..	5 a. m..	—
Europe, via Cherbourg, Southampton and Bremen	Lahn	July 11..	7 a. m..	—
Cuba, Campeche, Chiapas, Tabasco and Yucatan*	Vigilancia	July 12..	1 p. m..	—
Europe, via Southampton*	New York	July 12..	7 a. m..	9 a. m.
Europe, via Queenstown	Teutonic	July 12..	9 a. m..	10.30 a. m.
Belgium	Noordland	July 12..	10.30 a. m..	—
Central America (except Costa Rica) and South Pacific ports	Advance	July 12..	9.30 a. m..	10.30 a. m.
Porto Rico	U. S. Transport	July 12..	10.30 a. m..	—
Pernambuco and Santos	Asti	July 12..	10.30 a. m..	—
Curacoa and Venezuela*	Hildur	July 12..	11 a. m..	11.30 a. m.
Nassau, N. P.	Antilla	July 12..	1 p. m..	—
St. Thomas, St. Croix, Leeward and Windward Islands	Pretoria	July 12..	12.30 p. m..	1 p. m.
Santiago and Manzanilla	Bisenstein	July 13..	12 m..	—
Santiago and Manzanilla	Santiago de Cuba	July 13..	1 p. m..	—
Jamaica, Belize, Puerto Cortez and Guatemala:	Themis	July 14..	1 p. m..	—
Europe, via Queenstown*	Campania	July 15..	6.30 a. m..	—
France, Switzerland, Italy, Spain, Portugal, Turkey and Br. India, via Havre*	La Normandie	July 15..	6.30 a. m..	—
Netherlands direct	Rotterdam	July 15..	8 a. m..	—
Italy	Ems	July 15..	9 a. m..	—
Scotland, via Glasgow	Furnessia	July 15..	10 a. m..	—
Fortune Islands, Jamaica, Savanilla, Cartagena and Greytown	Adirondack	July 15..	10 a. m..	10.30 a. m.
Cuba*	Mexico	July 15..	11 a. m..	—
Barbadoes and Demerara	Caribbee	July 15..	10 a. m..	—
Haiti and Santa Martha	Andes	July 15..	10 a. m..	10.30 a. m.
North Brazil	Hubert	July 15..	12 m..	—
China, Japan and Hawaii, via San Francisco.	Coptic	To July 9..	6.30 p. m..	—
Hawaii, via San Francisco	Australia	To July 21..	6.30 p. m..	—
Australia (except West Australia), New Zealand, Hawaii, Fiji Islands, via Vancouver	Aorangi	To July 21..	6.30 p. m..	—
Australia (except West Australia), New Zealand, Hawaii, Fiji and Samoan Islands, via San Francisco	Mariposa	To July 21..	6.30 p. m..	—
China and Japan, via Vancouver	Emp of Japan	To July 25..	6.30 p. m..	—
China and Japan, via Tacoma	Olympia	To July 20..	6.30 p. m..	—
Society Islands	C'y of Papeiti	To July 26..	6.30 p. m..	—

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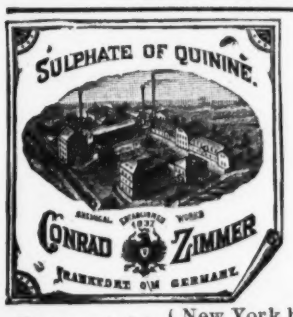

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DRUG MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 35 and 36.

Saturday Evening, July 8, 1899.

Advanced.	Declined.
Powdered opium,	Glucose,
Quicksilver,	Grape sugar,
Mercurials,	Golden seal,
Oregon fir balsam,	Mustard seeds,
Oil, sweet birch,	Cloves,
Oil, peppermint,	Pimento,
Arnica flowers,	Haarlem oil.
Coriander seed.	Cascara sagrada.

Opium.

The local market for the gum is unchanged at $3.10 for case lots and $3.12½ for jobbing quantities, and no business outside of a few 25 lb. and 50 lb. orders is reported. Powdered, however, has been marked up to $4@4.20, as to test, etc. Our cables this week seem to confirm our opinion, expressed a month or two ago, that all talk of a 10,000 case yield this year was farce comedy. As will be noted, the estimate has been still further reduced, the current figure being 5,000 cases.

Smyrna, Friday, July 7, 1899.

Ninety cases have been sold this week up to 8s. 9d. for shipment to London. The arrivals of new crop up to date aggregate 420 cases, against 70 up to the same time last year.

Smyrna, Friday, July 7, 1899.

Sixty cases have been sold this week. The market is very firm at 8s. 8d.@8s. 10d., and we expect an advance, as the crop estimate has been still further reduced to 5,000 cases.

Smyrna, Friday, July 7, 1899.

The market has been active and is closing firm at 8s. 9d.

..

Smyrna, Friday, July 7, 1899.

Opium is much stronger. Ninety-three cases of Karahissar have been sold during the week at 8s. 4d.@8s. 6d., and six of better quality at 8s. 8d.

Constantinople, Friday, July 7, 1899.

Two cases of new Balukeser have been sold at 8s. 7d., and one new Gheive at 8s. 2d.

Our letters this week are:

(From Correspondent D.)

Constantinople, June 23, 1899.

The only transaction to note is that of two cases new Gheive, sold at the parity of 7s. 8d. This price is rather astonishing for fresh opium, on account of the fact that the inevitable loss of weight makes new gum worth at least 5 per cent. less than old. We think that this order was given solely for the purpose of ascertaining the quality, whatever the price, but the consequence of this transaction is that now the owners ask more, but we cannot help thinking that they wish the price to go down for the next sales, in order to influence the markets of the interior. At the same time, this behavior proves that they are not charged with a heavy stock.

(From Correspondent E.) ..

Constantinople, June 23, 1899.

What we foresaw some time back, viz., that the opium crop had been greatly exaggerated and would not yield as much as was expected is gradually becoming evident to all. The interior has opened very high and the parity of 7s. 8d.@7s. 9d., f. o. b., is being freely paid by natives for new crop. It is becoming daily more evident that a yield of over 7,000 cases is practically impossible, and that prices will be if anything higher ere long. Stock of druggists on this market is barely 60@70 cases.

(From Correspondent A.)

Smyrna, June 17, 1899.

The crop of last year did not exceed 2,800 chests, including Salonica, but in spite of the low figure, which had not been witnessed since 1880, the drug remained lifeless. The market was maintained, indeed, up to November by the fear of a small crop for this year; it was not maintained, however, by any healthy consumptive demand, but merely by speculative holders, who only sold sparingly at about 10s. Consumers steered a cautious course all along, and when heavy rains fell late in the Autumn and definitely insured a good yield for 1899, they adopted the safest policy, viz.: that of waiting till the new crop was harvested, when prices can no more be propped up by all kinds of manoeuvres. This wise course caused a decline at short notice of 25% in values. Now, with a prospective crop of 8,000, added to a supply of 2,000 chests of old opium in Turkey, and the heavy supplies existing in England and America, the market cannot be sustained much longer. If any of your readers do not share my views, let them act contrariwise. I will only say, then, "The more fools, they."

Sales this week amounted to 2 chests at 7s. 7d. Arrivals of new, 125 against 13 for the corresponding period last year. This comparative statement clearly shows the importance of the new crop.

(From Correspondent B.)

Smyrna, June 17, 1899.

On account of the firmness of the holders, who are not willing to moderate the prices, the present week would have been void of transactions, if an obliged purchase of 2 chests "Karahissar," at a price equivalent to 7s. 7d. per lb., f. o. b. Smyrna, had not taken place. Such state is owing to the facilities made to the holders by our banks, which advance against deposits, with interest of 8% per annum, three-quarters of the value, calculated at present on 7s. 5d. per lb., f. o. b. Smyrna. So long as the holders have these facilities, no appreciable change will take place in our market. But, as soon as the banks have invested a sufficient amount and refuse, in view of the stagnation of sales, to accept any more deposits at said value, prices will take the downward tendency. If American and European buyers keep away from the market for a little while longer the reaction will come sooner than they expect, considering that present arrivals, compared to previous year's ones, are a great deal larger.

Arrivals, last crop, to date, 1,506 chests, against 3,518 last year; arrivals new crop, to date, 96 chests, against 27 last year. Stock last crop to date, 1,504, against 2,735 last year.

(From Correspondent C.)

Smyrna, June 17, 1899.

Our market continues in the same awkward position, with hardly any business doing, in consequence of the extraordinary pretensions of the holders. A purchaser who was in need of a couple of cases had to pay the equivalent of 7s. 10d. for them, and for a larger quantity a higher price would have to be paid, so that other would-be buyers had to retire from the market, being unable to fill the orders they had in hand. We fear this state of things may last longer than we suspected in our previous reports, and that receipts of the new crop will have to accumulate to the extent of about 1,000 cases before holders make up their minds to sell at lower rates. This may take two months, provided, of course, the purchasers in the consuming markets can afford to keep back their orders until then. It has been raining again in the interior and in some districts a portion of the new gum was washed away while it was being gathered; in some districts in the vicinity of Constantinople, the crop has suffered a little from prolonged drought, and taking all this into account the last estimate made of the crop would have to be reduced, say, to about 7,500 cases for all Turkey.

Receipts of the new crop up to date amount to 127 cases, against 11 at same time last year.

(From Correspondent F.)

Smyrna, June 16, 1899.

Present quotations for the various grades of opium are as follows:

	C. i. f. New York. Per lb.
Bogaditz Balukessar, sup., soft sightly	9s. 3d.
Bogaditz Balukessar, usual fine quality	9s. 0d.
Bogaditz Balukessar, manufacturing	8s. 6d.
Yerlis, soft sightly, superior	9s. 3d.
Yerlis, usual, fine quality	9s. 0d.
Yerlis, manufacturing	8s. 6d.
Karahissar, superior selected sightly	9s. 6d.
Karahissar, usual, fine quality	8s. 9d.
Karahissar, manufacturing sightly, for American use	8s. 6d.
Karahissar, manufacturing unsightly, for American use	7s. 9d.

Since my letter of the 10th inst., only two baskets of Karahissar talequale opium have been bought, at the parity of 7s. 9d. per lb., at which rate the market closes rather firm. Arrivals of the new crop up to date are 96 baskets, against 27 baskets last year.

(From Correspondent G.)

Smyrna, June 17, 1899.

This has been a very quiet week, with no business to report, except 1 case of selected Karahissar talequale for the Continent, at the equivalent of 7s. 11d. per lb., f. o. b. The news from the opium growers has been good as regards weather, for in the Karahissar and Koniah districts rain has fallen, the lack of which of late began to do harm there to the Spring sown plants. Notwithstanding, however, to the good reports we have had, and to buyers not responding to last week's advance, our holders have not come forward with offers, but are still very tenacious, and were buyers to go to them, they would turn a deaf ear to all demands, even at our last quotations, which were from 7s. 6d.@8s. 8d., as to quality. In the lowlands, where the harvesting and collection of new drug is in full swing, high prices continue to be paid. This naturally prevents a decline taking place on this side, but sooner or later, when our market is well stocked, figures we trust will settle to a more reasonable level. The arrivals of new amount to 130 cases, against 33 at same period last year.

Quinine.

The situation is unchanged and uninteresting. Manufacturers continue firm in their views and are warranted in doing so by the statistical position of the bark. Diversified opinions emanate from second hands. While the majority are quoting 33@34c., there is a limited

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amount of undesirable stock to be had at 31@32c.

From Amsterdam we have the following:

Amsterdam, June 23, 1899.

At the bark auction on July 13th next there will be offered 5,611 packages of Ledgeriana and Hybriden, and 577 cases and 677 bales of succirubra, a total of 6,865 packages, weighing 568,713 kilograms; whereof 713 packages are government culture and 6,152 packages private culture.

The stock in first hands in Amsterdam on the 20th inst. consisted of 2,044 packages of government culture and 8,259 packages of private culture, a total of 11,303 packages, which total includes the offerings for the July auction.

The first auction sale of quinine in Batavia, Java, will occur in January, 1900, and will consist of about 10,000 kilograms of quinine.

Cinchonidin.

This article continues in scarce supply and correspondingly firm in value. Supplies are offered sparingly at 35@36c.

Miscellaneous.

ACID CITRIC.—Domestic manufacturers continue to quote barrels at 42c. and kegs at 42½c. Second-hands quote domestic acid at ½c. less, and Sicilian is in plentiful supply at 40c. for kegs. The California Fruit Grower says:

The San Diego Land and Town Company, at National City, San Diego County, has for some considerable time been experimenting with the manufacture of citric acid and oil of lemon. It now reports a successful termination of these experiments and is operating a factory of considerable capacity, manufacturing citric acid and oil of lemon from the refuse fruit of that section, the capacity of the factory being sufficient to take all the lemons not suitable for market or shipment. The managers of the factory claim to have made some improvements in the methods of manufacturing which are trade secrets and by the aid of which they are enabled to turn out a very superior article.

CARBONATE OF AMMONIA.—The seller of 10-barrel lots at 7¾c. has advanced his quantity price to 8c.

CANTHARIDES. — Whole Chinese flies are in still more plentiful supply, an arrival having reached this port this week. The holders ask 45c. for them. Russian are obtainable at 42c.

COCOA BUTTER.—Our Amsterdam correspondent cabled us last Tuesday as follows:

Amsterdam, July 4, 1899.

At to-day's auction sale of cocoa butter, the average price realized was 80 Dutch cents per ½ kilo, an advance of 4 Dutch cents over the last sale's price.

The offerings at Amsterdam consisted of 70 tons, mainly Van Houten's. At London 45 tons of Cadbury's was brought forward and sold for an average of 15 9-16d., an advance of about 1d. over last month's price.

The effect of these sales on the local market has been to stiffen the views of holders, but both bulk and 12 lb. boxes are still obtainable at the prices quoted last week, viz., 33@34c. for bulk and 37@39c. for the cakes in 12 lb. boxes.

COD LIVER OIL.—Locally the situation is dull and uninteresting, and $19.50@21.50, as to brand, is a nominal quotation in the absence of business. The same can be said of the Norway markets, judging by our cables, which read:

Bergen, Thursday, July 6, 1899.

The market for cod liver oil is very dull, but there has been no change in price.

Aalesund, Friday, July 7, 1899.

The market continues quiet. Finest Lofoten is worth 58s.

Our Aalesund correspondent writes as follows:

The fishery in Finmarken will be closed within a short time, and already a large number of the fishermen have closed operations for the season. The production of Finmarken cod liver oil up to date is 1,752 hectoliters, against 3,339 hectos. in 1898; 3,198 in 1897, and 9,769 in 1896.

COLOCYNTH APPLES.—Trieste are conspicuous by their firmness, and 35@40c., as to quality, cannot be shaded. From Trieste we hear:

June 24, 1899.

Trieste colocynth apples are rather scarce; peeled apples, mostly burst, but containing no loose seeds, are quoting 152s. per cwt., c. and f. New York.

CUTTLEFISH BONE.—The news from Trieste which appeared in this column last week has still further strengthened values, and it is doubtful if more than a strap or two of Trieste would be sold without causing a subsequent advance in price over the current quotation of 12c. Jewelers is also firmly held at 30c. for small and 60c. for large. From Trieste this week we have the following:

June 24, 1899.

Cuttlefish Bones.—Our remarks in our last mailed report have no doubt had your attention. Since that time no arrivals of the new catch can be recorded, the consequence being that our market is still nearly bare of stock, and higher rates must be looked forward to.

ERGOT.—The statistical position of German and Russian is unusually strong, and the local market can be said to be firm at 29@30c., with upward tendency. Spanish shares in the firmness, and 38@40c. cannot be shaded. The following letter is interesting:

Hamburg, June 26, 1899.

The position of ergot remains unchanged here; in fact, I am rather inclined to think that the chances are we must see higher prices, for reports from Russia continue to be more and more alarming, and state that the excessive drought has had an exceedingly detrimental effect on the crops. The dry period fell just in the month of May, when an excess of moisture is always needed to produce the outgrowing of ergot, and all this speaks for a small crop to come, if we may see any at all this year. One of my old and trustworthy suppliers informs me that even in his specially rich rye-growing districts the peasants are standing in face of a famine this year, and in order to make the best of the bad situation the peasants have now taken to ploughing their fields over again, on which they had planted rye, and are now trying to grow something else on them. I am selling here locally nice sound grain at the full price, Mk. 265 per cent. Ko., ex store, and that is speaking plainer language than all reports. Occasionally a weak owner may be met with, who cannot hold out, and sacrifices a few hundred kilos of his stock, but that does not characterize the position of our market.

GLUCOSE AND GRAPE SUGAR.—Lack of demand has caused values to decline, $1.42 now being asked for glucose, 41 deg., and for grape sugar 70 deg.

GLYCERINE.—The situation betokens a general advance, but no manufacturer yet seems willing to follow the lead of the Western house which marked up their figures last week to 12½c. That a general advance will occur sooner or later is undisputed, in view of the prevailing high price and rising tendency of the crude material. One local manufacturer considers that the position of crude warrants an advance of at least 1c. in the price of refined. This would bring values up to 13@13½c. for drums. It is expected that the soap men will start the ball rolling. We know that one of them sold 20,000 lbs. last week at ¼c. above their previous price.

HAARLEM OIL.—The advance noted last week has been counteracted by the arrival of fresh supplies, which are offering at lower figures, but not as low as the oil could be procured two weeks ago. The range is now $2.18@2.50 for old style and $2.68@3.00 for new style.

MERCURIALS.—The advance in quicksilver has caused the manufacturers of mercurials to mark up their prices. The revised quotations are: Blue pill, 37@38c.; calomel, 75@77c.; corrosive sublimate, 66@68c.; red precipitate, 85@87c., and white precipitate, 90@92c.

QUICKSILVER.—The bulk quotatio has been advanced as follows: Fro 1 to 25 flasks, $46.50 per flask; from 25 100 flasks, $45.50; 100 flasks and ov $45. The jobbing price is according up to 59½@60c.

VENICE TURPENTINE.—Spot val

CITRIC ACID
IN KEGS OF 112 LBS. NET.
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NASCIO AVELINE & CO., Messina, Sicily.
SAMPLES ON APPLICATION. CORRESPONDENCE SOLICITED.
DODGE & OLCOTT,
NEW YORK

ues are firm at 14@17c., as to quality. From Trieste we hear:

June 24, 1899.

The first fresh arrivals are expected in the course of July; prices for the same will be as last year, viz: 62s., 6d., in barrels, tare kg. 30 per barrel; 64s. in cases of 2 tins; tins gross for net.

Balsams.

Owing to temporary scarcity, Oregon fir is a shade higher and spot goods are held at 90c. in barrels and $1 in cans. Supplies to arrive are obtainable at 5c. less. Our Portland correspondent says:

Portland, Ore., July 2, 1899.

OREGON BALSAM FIR—This is to be had now in very small quantities, the gatherers being few. The best grade of balsam is now obtainable at $30 per barrel.

Barks.

Last year's cascara sagrada can now be bought at 5⅞@6c. in the local market. This year's peeling is being offered to local dealers at 4¼c., laid down here, but they will not pay this price, firmly believing that values will depreciate. Our Portland correspondent writes:

Portland, Ore., July 2, 1899.

It is stated by parties who claim to have made a thorough investigation that there are now in sight along the Oregon Pacific Railroad alone eighty carloads of cascara sagrada, say, in round numbers, 900 tons. Other districts are turning out large quantities, and with a large stock carried over in New York, perhaps 150 tons, and Europe well supplied, very low prices are likely to rule.

Red cherry bark is scarce in Florida and our correspondent there states that the dealers there are having a hard time to get enough to fill orders. Prickly ash is also none too plentiful in that section of the country.

Beans.

A fair jobbing business is reported in the various items in this department, but there have been no price changes. A correspondent at Papantla writes:

Papantla, June 24, 1899.

As regards vanilla beans, I would say that some merchants have been selling to an agent of the house of Orizaba, who is buying much, and as they see that they fare better selling here than exporting they have done so. All those who have exported are repenting it. Some growers believe that the entering year will be miserable, for the frost has caused great damage to the plantations.

Berries.

Cubeb continue uninteresting, and the movement is slow at 6@8c., as to quality. Juniper are obtainable in a large way as low as 2½c.

Essential Oils.

Anise is firm at $1.42½@1.45. Camphor can still be had at 5c. in a large way. Citronella continues unsettled, but there is no quotable price change. Clove is weak at 50@52½c. in cans and 52½@55c. in bottles, as to holder. Messina essences are unchanged. Peppermint has been lively and tins have advanced to 85c.@$1.05, as to quality, etc. Natural wintergreen (sweet birch) is higher and the quoted range is now $1.20@1.25. Scarcity is the cause. Our Kezanlik correspondent writes:

Kezanlik, June 18, 1899.

The distillation of the roses terminated about ten days ago and the total duration of the distillation has not exceeded three weeks, because of the great heat having hastened the opening of the flowers. When the weather is humid the distillation of the essence can continue for a month. The amount of the crop may be estimated now in a general way, and I do not hesitate to say that the total production of otto of rose in Bulgaria this year reached about 2,000 kilograms. This outturn is equivalent to that of last year, which shows that the prices for the new essence ought not to exceed those of last year. But the distillers will no doubt make an effort to obtain more remunerative prices on the ground that the stocks of old essence are smaller than they were at this time last year, which is quite true, there being only 250 kilos of old essence on hand this year, whereas there were 500 kilos last year. The prices for new essence cannot be fixed before one month from now.

Flowers.

Light spot supplies, coupled with the recent reports of damage to new crop, have caused arnica to advance to 7¾@8c. Considerable demand is reported for Alicante saffron, and the orders have been filled at $4.90@5.25, as to quality, etc. We have the following reports on insect flowers, the first communication being by cable:

Trieste, Friday, July 7, 1899.

The market has declined, and 47s. 6d. will now buy open insect flowers of the new crop. Proportionate figures are asked for half closed and closed. Old open flowers are quoted at 43s., and the better grades at corresponding prices. There are large stocks on hand.

Trieste, June 24, 1899.

Insect flowers are nominally unchanged, but there are hardly any buyers in the market, except for fine closed flowers, which fetch full prices. Old flowers are quite neglected, and only a small sale of open is reported at the parity of 48s. c. & f. N. Y. The prices which have been paid for new flowers are the following: Open 50s@51s., half closed 63s. 6d.@82s. 6d., closed 98s. 6d.@120s. cost and freight New York. Some owners even ask 130s. c. & f. N. Y. for the finest quality, but this price has not yet been paid. Arrivals during the week ending to-day, 760 cwts., and sales 200 cwts.

Gums.

Aloes are firm at the following prices: Cape, 5¼@6c; Curacao, 3⅛@3⅜c.; Curacao, in gourds, 4½@5c.; Socotrine, 20@24c. Arabics are higher abroad, especially sorts, but there is no quotable advance so far in the local market. Camphor is quiet at the recently revised price. The Osaka and Kobe Trade Review says in its issue of June 10:

Crude Camphor—Buyers show no disposition in spite of an easier price offering by sellers. Unless the monopoly selling price, which is expected to be revised, be made clear, it would be impossible to induce buyers. Refined is dull of sale. Quotations:

Crude .....$57@58 per picul

Refined, Sumitomo's:

	Per 100 lbs.
1-oz. tablet	$70.00
¼-oz tablet	71.00
½-oz. tablet	72.00

Latest correspondence from Formosa says: "The camphor monopoly bureau intends to export refined camphor abroad and a refining factory is going to be built in Tai-Hoku."

In the local market myrrh is quoted at 15½@23c., as to quality. From Trieste we hear:

June 24, 1899.

Myrrh—Fine pale, in sorts, is a little weaker, and quotes to-day 65s., c. and f. New York.

Senegals are higher abroad, but the spot quotation is unchanged. Tragacanths are very firm in the local market and our Constantinople advices this week report the situation there as unchanged, and note a sale of 36 bags of low quality at 84s. 6d.

Herbs and Leaves.

Aconite are firm at 8@10c., as to quality. Belladonna herb is somewhat scarce, and 11@12c., cannot be shaded. Deer tongue are quoted at 4@5c. Our Florida correspondent writes:

Jacksonville, July 3, 1899.

There will be quite a short crop of deer tongue, but what there is is fine stuff.

Damiana are firm at 7½@8c. Laurel are selling quite freely at 3¼@3¾c., as to quality, quantity, etc. Italian picked sage is held at 3@3¼c. Our advices from Trieste this week include the following:

June 24, 1899.

Sage, Italian picked, is very scarce, the quotation being 7s. 6d., c. and f. New York. The new crop is still a good way off and buyers

DIPHTHERIA ANTITOXINE
(Behring's) Dry and Liquid
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Sulphuric, Hydrochloric Acids, C. P.
Precipitated Carbonates Iron and Copper. Precipitated Chalk.
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should not defer covering themselves any longer.

All varieties of senna are firm, with upward tendency.

Roots.

German aconite is in firm shape, and 11½@12½c. cannot be shaded. Alkanet is held at 5¾@6½c., and is not very plentiful. The situation in Germany is indicated by the following:

Hamburg, June 26, 1899.

Alkanet root is so far rather sparingly offered and prices continue firm and high. I have so far only been able to secure some two tons.

Berberis aquifolium is firm at 9@10c. for true root. Our Pacific coast correspondent writes:

Portland, July 2, 1899.

A lot of prime berberis aquifolium root was sold last week at 4½c. None is coming in now, all attention being given to overloading the market with cascara sagrada.

Blueflag is held locally at 7@9c. Our root report from Florida states:

Jacksonville, July 3, 1899.

There seems to be enough blueflag to supply the demand. There is a large quantity of stillingia, and more has been dug this year than ever before. There is a scarcity of jessamine root and butterfly root, and it is hard to get enough to fill orders.

Gentian is firm at 3½@4c. The following from Trieste is interesting as an indication of what the future may have in store for gentian:

Trieste, June 24, 1899.

Red Gentian—Extraordinary large quantities having been gathered last year, our government has prohibited digging for this season, fearing that the plant might get wholly extirpated. Higher prices must therefore be expected, and our present quotation of 14s., c. and f. New York, for 10-ton lots, deserves special attention.

As surmised in last week's Reporter, golden seal has sagged to 49@55c. and bids fair to drop still further. Orris root is again a trifle higher abroad, and local holders show still more firmness. Florentine, however, can still be bought at 7@9c., and Verona at 5@7c., as to quality, etc. An active demand has developed for Western senega, and one sale of 2,500 lbs. and another of 500 lbs. are reported at 25c. There is not much senega in the hands of New York dealers, but the large quantities in the West act as a damper on values.

Seeds.

Canary continues very firm, and the limit on some consignments of Smyrna has been raised to 2¾c. Goods are obtainable, however, at 2½@2⅝c.

From Constantinople we have the following letter with reference to canary seed:

June 23, 1899.

The weather during the past three days has been exceptionally warm and most detrimental to the few acres of seed which promised well. The value of this article is fast rising, and to-day dealers would not take under 9s. Even at this not more than a few hundred bags could be picked up.

Coriander has advanced in sympathy with foreign markets. Natural is now quoted at 2½@2⅝c., and bleached at ¼c. more. The crop of mustard in Bari has been injured by rain, and what was expected would be fine seed will therefore be poor. It is offered in Bari at 22s. 6d., c. i. f. New York. No new California brown is offering yet in the West. Sales of old have been made at 4¾c, and the quotation is now 4⅞@5c. Yellow is also lower, and 3¾@4c. will buy.

Shellac.

A dull and featureless week is the report from all quarters. Values are unchanged, and only a desultory jobbing business seems to be doing.

Spices.

Spices are also quiet. Cloves have declined to 6¾@7c. and are easy at this range. Pepper is none too firm at 11c., and this figure might possibly be shaded. Pimento is lower and 6¾@7c. will buy.

Egg Albumen.

(Continued from page 29.)

strated that large proportions of acids and alkalies yield products of high specific rotation.

Panormoff has studied the specific rotations of fractionally precipitated crystallized egg albumin and concludes that there are two albumins present in egg white, one with a specific rotation of —23.6 deg. and the other —46.2 deg. The albumin with the lower rotations he obtains from the so-called egg globulin precipitated by adding an equal volume of saturated ammonium sulphate solution to the egg white. This he succeeded in crystallizing and, so prepared, finds it to have the properties and composition of albumin. He considers, therefore, the egg globulin to be a compound of egg albumin with some unknown substance.

As the egg white is alkaline to litmus and ammonia is set free on adding to it a saturated solution of ammonium sulphate, it is not surprising that a product should be produced of different solubility from that of the albumins which we have been considering.

Panormoff converted his crystallized albumin into a chloride by dialysis against two-tenths per cent. hydrocloris acid. He analyzed the product obtained and it is interesting to note that, if calculated free from hydrochloric acid, the figures for the albumin are in exceedingly close agreement with the average of the best analyses of albumin. Furthermore, the proportion of hydrochloric acid in the compound is exactly the same as that which I found with tropaeolin to be fixed by the albumin; that is, I found that one gram of albumin united with eight cc. of decinomal acid or 0.0292 hydrochloric acid to form a compound showing no free acid with tropaeolin, while Panormoff's chloride contained 2.92 per cent. or exactly the same quantity.

In regard to the composition of egg albumin, confusion has recently been caused by Hofmeister, who states that he has found in repeatedly crystallized egg albumin 1.01 and 1.18 per cent. of sulphur and that Dr. F. N. Schulz, in his laboratory, has obtained 1.24 and 1.27 per cent. He consequently calls in question the purity of the samples of crystallized albumin, analyzed with great care by Bondzynski and Zoja. As Hofmeister's figures for carbon are higher and for nitrogen lower than those of Bondzynski and Zoja, as well as of other investigators who have analyzed amorphous egg albumin, the whole question of the composition of this substance is again thrown into confusion.

Having at hand a sample of egg albumin, which had been three times recrystallized in the manner described by Hofmeister as necessary for its purification, and obtained in the same proportion from the egg white as stated by him to be the usual yield after thorough purification, and which had been coagulated with alcohol and thoroughly washed until all the ammonium sulphate had been removed, I analyzed it, dried at 110°, with the result given under No. 1.

Analyses of the seven fractionally crystallized preparations A.1-4, and H.1-3, were made after drying them to constant weight at 110°.

	No. 1.	H.1.	H.2.	H.3.
Carbon.....	52.18	52.85	52.33	51.72
Hydrogen.....	6.91	6.92	6.90	6.90
Nitrogen.....	15.67	15.66	15.77	15.26
Sulphur.....	1.70	1.572	1.644	1.958
Oxygen.....	23.54	22.998	23.356	24.162
	100.00	100.00	100.00	100.000
Ash.....	0.56	0.09	0.67	0.59
Total phosphorus pentoxide	....	0.40	0.21	trace
	A.1.	A.2.	A.3.	A.4.
Carbon.....	52.60	52.61	52.33	51.44
Hydrogen.....	7.02	6.94	6.93	6.88
Nitrogen.....	15.54	15.76	15.40	15.20
Sulphur.....	1.610	1.612	1.778	1.912
Oxygen.....	23.230	23.078	23.562	24.568
	100.000	100.000	100.000	100.000
Ash.....	0.87	0.65	0.67	0.40
Total phosphorus pentoxide	0.37	0.28	trace	trace

There can no longer be question about the amount of sulphur in albumin being greater than that stated by Hofmeister. My sulphur determinations were made with extreme care, fusing more than a gram of the substance over an alcohol lamp with pure sodium hydrate and peroxide in a nickel crucible,* dissolving the fusion in an excess of hydrochloric acid, neutralizing most of the excess of acid and precipitating with barium chloride from a boiling solution of at least 800 cc. volume. Blank determinations showed no trace of sulphur in the reagents and also that none were absorbed during the fusion over the alcohol lamp. These results agree with those obtained by Bondzynski and Zoja, though the difference in composition between their extreme fractions was not quite so great as found for my preparations.

The composition, rotation, heat-coagulation points and reactions of the crystallized egg albumin obtained by aid of hydrochloric or acetic acids show this to be the same substance as that which has in the past been regarded as egg albumin.

My results, those of Bondzynski and Zoja, and of Panormoff, make it plain that there are two protein substances in the egg white, which are commonly obtained admixed when preparing egg albumin by the usual processes. Whether the extremes of my fractional precipitations of these two albumins consist wholly or even largely of each one of these bodies requires further investigation of large quantities of egg white. This work we now have well under way.

Moerner has described ovomucoid as identical with Neumeister's pseudopeptone, and states that it constitutes about one-eighth of the organic substance of the egg white. As this substance is described as largely, though not wholly, precipitated by two-thirds saturation of its solution with ammonium sulphate, it ought, if present as such in the egg white, to be found among the more soluble fractions thrown down by successive additions of ammonium sulphate. It is intended to direct especial attention to the isolation of this substance and to determine if possible in how far it may be admixed with the albumins.—Journal Am. Chem. Society.

*I have found many times when using a nickel crucible that, on dissolving the fusion, there was a black substance present (this looks and behaves like nickel sulphide, but it seems hardly possible that nickel sulphide could escape oxidation), which, when filtered out and oxidized, was found to contain sulphur. This black substance should be dissolved by the chlorine liberated from the hydrochloric acid by the peroxide of hydrogen, otherwise too low results will be obtained.

New Corporations.

The Ohio Valley Drug Co., Wheeling, W. Va., to manufacture and deal in all kinds of drugs. Capital, $1,000,000. Incorporators: B. Exley, R. L. Seabright, J. I. Carpenter, L. F. Stefel, C. F. Brandfass, all of Wheeling.

The Pittsburgh Homeopathy Pharmacy Co., Pittsburgh, to manufacture medicines. Capital, $10,000. Incorporators: G. A. Mueller, C. F. Bingaman, W. L. Bond, Jr.; E. H. Pond, W. F. Edmundson, all of Pittsburgh.

The American Pharmacal Co., Jersey City, to manufacture medicines, chemicals, alkalies, soaps, etc. Capital, $750,000. Incorporators: Leighton Calkins, Wm. U. Parsons, Ernest A. Smith, Henry W. Mayo, Henry E. Maul.

The Consolidated Mica Co., Providence, W. Va., to do a general mining business. Capital, $5,000,000. Incorporators: E. W. Traesdell, T. A. Sharron, J. R. Powers, of Boston; H. J. Wilkins, of Belmont, Mass.; S. K. Paize, of Warner, N. H.

The National Glass Co., Pittsburgh, to manufacture glass, etc. Capital, $1,000. Incorporators: D. C. Ripley, of Pittsburgh; H. C. Fry, of Rochester; J. M. Jamison, of Greensburg; D. G. Jenkins, of Greentown, Ind.; D. W. Baird, of Wellsburg, W. Va.

The Continental Manufacturing Co., capital $1,500,000, has been incorporated in New Jersey to manufacture and sell chemicals, electrical and metallurgical products. The incorporators are: Frank M. Zeller, Joseph W. Robinson and Henry W. Paul, of Philadelphia; Wm. W. Frazier, of Jenkintown, and Isaac D. Wheaton, of Camden.

Ferric Cyanide Pigments.

Blue Mineral Colors.—All pigments occurring under the names of Paris blue, Berlin blue, Neuhauser blue, mineral blue, Hamburg blue, Milori blue and steel blue consist, if pure, of ferric ferro cyanide Fe4 [Fe (C N) 6] 3. The compound always forms in the shape of a precipitate of deep blue color, if a ferric salt solution is mixed with one of blood lye salt (prussiate of potash). The following prescriptions give operations tried in practice for an advantageous production of ferric cyanide colors:

Glossy Paris Blue "A."—In a cask holding about 200 liters fix a wooden discharge cock about four inches above the bottom. When this is done dissolve in it thirty kilos. of green vitriol, unoxidized if possible, in fifty to sixty liters of hot water, and fill up the cask with cold river or rainwater. The water used for this operation must not be spring water, but soft water (rain water, or at least river water), otherwise the gloss of the color will be impaired. The prepared green vitriol solution is left to stand for two days, so that all impurities can settle. Now let the settled, green, clear liquid run by means of the faucet slowly into a larger vat holding fully 400 liters, and take care that no dim sediment is carried along. In a second cask holding about 200 liters prepare a solution of thirty-three kilos. of yellow blood-lye salt (prussiate of potash) with hot water. This solution mix with one-half to three-fourths kilo. of nitric acid until the solution has assumed a greenish color. The blood-lye salt solution is now slowly run into the green vitriol solution, stirring constantly. The resulting blueish precipitate is left to deposit. Next draw off the water in excess and place the mass on filters. When the precipitate has acquired such consistency that it can be taken out with a wooden spoon, place it in a copper kettle and heat to 80° C. After heating, put the heated mass in a large washing vat. In the meantime a solution should be prepared of four kilos. of ferric chloride with hot water in a wooden vessel, which add to the heated paste in the washing tub. After stirring well oxidize with sixteen to eighteen kilos. of nitric acid (36°), and cover up the tub, providing a wooden pipe for the escape of the poisonous vapors. From time to time take a sample of the pigment, using a test tube, in order to see if the gloss is increasing. When the oxidation is finished pour in eight to ten kilos. of hydrochloric acid (technically pure) and allow clean soft water to run on the blue at once. One should endeavor to renew the water twice daily, the pigment, as a rule, being neutral after washing ten to twelve times. Place the mass thus heated on filters, which, distributed on wooden hurdles, are exposed to strong heat for drying. If the pigment is desired to crepitate on fracture, add, before filtering the color, a clear solution of one-eighth to one-fourth kilo. of gum arabic.

Glossy Paris Blue "B."—Dissolve hot in a tub of 100 kilos. of blood-lye salt (prussiate of potash) in 500 liters of kilos. of Green vitriol in 500 liters of water. Allow these two solutions to settle for twenty-four hours. After settling draw the clear liquids from both dissolving tubs into a large precipitating vat with stirrer. The precipitating vat should hold about 5,000 liters. While entering the above solution into the precipitating vat, cause 2,000 liters of soft water to run in simultaneously. The precipitation is carried out with constant stirring, and special attention should be paid that green vitriol in excess is always present. Precipitation finished, add two carboys of hydrochloric acid (22° Bé) and permit the jet of steam to act on the precipitate until it boils. Meanwhile a solution of 80 kilos of chloride of lime in 400 liters of water should be made. Of this clear solution add to the above colormass until a filtered sample gives a bluish precipitate. Excess of chloride of lime should be avoided, but two or three pailfuls can work no harm. Now place the blue into a large washing vat and wash it until the blue is perfectly free from iron and acid, which is generally attained after 10 to 12 washings. The blue is next pressed on the filter press, cut and dried like Paris blue "A," or else it is stored in paste form. Cheaper varieties are produced by admixtures of heavy spar, gypsum, starch, etc., the most general being as follows:

Paris Blue.—Blue paste—No. 1, 45; No. 2, 45; No. 3, 45; and so forth. Heavy spar—No. 1, 20; No. 2, 30; No. 3, 45; and so forth.

The blue paste (Paris blue in paste form) is calculated at 60 per centum of pigment. If it contains more than 40 parts of water, proportionately more blue paste should be employed. The admixtures, such as starch, heavy spar, gypsum, etc., are added to the Paris blue paste by washing it in through a sieve and after sufficient stirring the mass is ground on wet mills, pressed, cut into pieces and dried at great heat.

Paris Blue Soluble in Water.—Pure Paris blue with gloss is ground in paste form with oxalic acid. Take one part of oxalic acid to every ten parts of Paris blue (calculated dry, hence 16 2-3 parts Paris blue in paste form @ 60 per centum). This mixture is intimately ground and dissolved with as little hot water as possible. Allow the solution to settle and pour off the dissolved blue liquid, taking care that no undissolved residue is carried along. Now make a moderately strong Glauber's salt solution and with this precipitate the Paris blue again, place the precipitate on filters, wash carefully, stopping when the water used in washing commences to turn blue. Now squeeze the blue, cut in pieces and dry the latter on wood hurdles at strong heat.

"Neuhauser" Blue.—Prepare a solution of 50 kilos of green vitriol and another of 50 kilos of red blood lye salt (prussiate of potash). These two solutions are mixed with constant stirring and the resulting precipitate is washed until neutral. Then it is pressed, cut in pieces and dried with strong heat on wood hurdles.

Imitation "Neuhauser" Blue.—This is obtained by making the following mixture: To 100 parts of Paris blue in paste form add 25 to 50 parts of light spar. After the mixture has been thoroughly intermixed grind it on a wet mill. Now press out the blue, cut in pieces and dry as aforesaid.—Farben Zeitung.

Wholesale Prices Current.

☞Our Quotations are those of Importers and Manufacturers, for original packages and large lots. For broken lots higher prices are asked.

Oils, Etc.

Vegetable Oils.

Linseed, city, raw, in bbls	℔ gal.	39 @40
boiled, in bbls		41 @42
Out of town on spot		36 @37
Calcutta, raw, in bbls		54 @—
Varnish oil, American		— @—
Calcutta		54 @56
Cottonseed, crude, prime		21 @21½
" " f.o.b.mills		14 @18
Crude, off quality		18 @19
Yellow summer, prime		26½@27
Yellow summer, butter		30 @31
Yellow summer, off quality		25½@26
White summer		30 @32
Yellow winter		30 @32
White winter		31 @32
Soap stock	℔ lb.	75 @80
Olive	℔ gal.	52 @57
Olive soap stock		3¾@ 4¼
Palm, kernel		4½@ 4¾
Lagos		5¼@ 5½
Castor No. 3		9¾@10¼
Cocoanut, Ceylon		5¾@ 6
Cochin		7 @ 7½
Corn		3 45@3 75
Peanut, white		60 @—
yellow		55 @—
Rosin, first run	℔ gal.	10½@—
Second run		12½@—
Third run		14½@—
Fourth run		16½@17
Rapeseed, in bbls, No. 1		57 @58
No. 2		52 @54

Animal and Fish Oils.

Black fish, crude	℔ gal.	— @—
Bleached winter		— @—
Cod, domestic, prime		33 @35
Newfoundland		38 @40
Degras, English	℔ lb.	2¾@ 3
French		5 @ 5½
German		2½@ 2¾
Herring	℔ gal.	— @—
Lard, prime		40 @42
Extra No. 1		35 @37
No. 1		30 @31
No. 2		26 @27
Menhaden, prime, crude		23½@24
Good merchantable		23 @24
Brown strained		27 @28
Light strained		28 @29
Bleached winter		— @31
Ex. bleached winter white		34 @35
Neatsfoot, white		50 @52
Prime		44 @45
Extra No. 1		38 @39
Dark		28 @30
20° cold test		75 @80
30° cold test		65 @70
Red, Elaine		28 @30
Saponified	℔ lb.	4 @ 4¼
Sea elephant, bleached winter	℔ gal.	48 @50
Natural water		43 @45
Seal, bleached water white		— @—
Sod		32 @33
Sperm, crude		50 @52
Natural spring		50 @52
Natural winter		55 @—
Bleached spring		55 @57
Bleached winter		60 @—
Tallow, prime		44 @ 45
Dark		30 @32
Whale, crude		— @—
Natural winter		— @43
Natural spring		— @42
Bleached spring		— @44
Bleached winter		— @45
Extra bleached winter		— @48

Mineral Oils.

Black reduced, 20 gravity, 25@30 c. t.	7¼@ 7¾
29 gravity, 15 cold test	8¼@ 8¾
29 gravity, zero	11¼@12¼
Summer	6¾@ 7¼
Cylinder, light filtered	13¼@15¾
Dark filtered	11¼@16¼
Extra cold test	21¼@25¼
Dark steam refined	8¼@13¼
Natural, Franklin, 32 gravity	10¼@15¼
Smith's Ferry, 33@34 gravity	7¾@ 8¾
West Virginia, 29 gravity	22¼@24¼
Neutral filtered lemon, 33@34 gravity	13¼@18¾
White, 33@34 gravity	21¼@23¼
32@34 grav. bloomless	13¼@18¾
32 grav. wool grade	11¼@14¼
Paraffine, high viscosity	20¼@25¼
903-907 sp. gr.	9½@ 9¾
903 sp. gr.	8½@ 8¾
883 sp. gr.	7¾@ 8
875 sp. gr.	7½@ 7¾
865 sp. gr.	7½@ 7¾
Red Paraffine, No. 1	9 @ 9½
No. 2	8½@ 9
Spindle No. 1 Filtered	15¾@16¾
No. 1	12¾@13¾
No. 2	11¾@13¾
No. 3	10¾@11¾
No. 4	10¼@10¾

Oil Cake, Meal, Etc.

Calcutta cake, city	℔ ton. 24 50@25 00
City domestic	24 00@24 50
Western, in bags	24 00@24 50
Cottonseed cake at Memphis	15 50@16 50
at New Orleans	19 00@20 00
at New York	22 75@23 00
Cottonseed meal at Memphis	15 50@16 50
at New Orleans	19 00@20 00
Corn cake	22 00@22 50
" " meal	22 00@22 50

Wax, Lard, Tallow, Etc.

Paraffine wax, crude	℔ lb.	3¾@ 4¼
Refined 120 m. p.		— @ 5¼
125 m. p.		— @ 5½
130 m. p.		— @ 6
135 m. p.		— @ 6¼
140 m. p.		10¼@11¼
Candles, adamantine, 6s, 14 oz.	℔ lb.	6¼@ 8
Paraffine, 4s, 6s and 12s		7 @ 8
12 oz.		5¼@—
12s, 16 oz.		8 @—
14 oz.		7 @—
12 oz.		—@ 6
Patent Sperm, 4s and 6s		38 @40
Sperm, 4s and 6s		33 @34
Stearic Acid—Plain 4s, 6s, 8s. 9		@—
patent ends, 4s and 6s		9½@—
cartons, 6 lbs. each		9¼@10
Lard, spot, tierces		5 20 @ —
export, pkgs.		4 75 @ —
compound		4¾@ 4¾
neutral		— @ —
Oleo stearine		5¾@ 5¾
Lard "		5 20 @5 40
Tallow		4 5-16@ 4¾
Stearic Acid		8@ 8¼

Naval Stores.

Sprits turpentine	per gal.	42 @ 42½
Rosin, strained	per bbl.	1.27½@1.30
Good strained		— @1.30
E		1.35 @1.45
F		— @1.55
G		— @1.65
H		— @1.70
I		— @1.75
K		— @1.90
M		— @2.20
N		— @2.50
Window glass		— @2.75
W W		— @3.00
Tar, regulars		2.00 @2.10
oil barrels		3.50 @3.55
Pitch		— @1.70

Paints, Varnishes, Etc.

White Lead, Zincs, Etc.

White lead, American dry	℔ lb.	5 @ 5½
in oil		5¾@ 6¼
English in oil		7¼@ 8¼
Litharge, American powdered		5½@ 5¾
English flake		7¾@
Glassmakers'		7¾@ 8
Red lead, foreign		7¾@ 8¼
American		5¾@—
Orange mineral, American		7¾@ 8
English		8¾@ 9½
French		10¾@10¾
German		8½@ 9¾
China white		9 @10
Flake white		8 @12
Cremnitz white		14 @18
Zinc white, Paris G. S., 50 bbls.	9⅞ less	4 ℔ ct
G. S., 25 bbls.	9⅞	2 ℔ ct
G. S., 10 bbls.	9⅞	1 ℔ ct
R. S., 50 bbls.	8⅝	4 ℔ ct
R. S., 25 bbls.	8⅝	1 ℔ ct
R. S., 10 bbls.	8⅝	1 ℔ ct
Antwerp, R. S., 50 bbls.	7⅞	4 ℔ ct
R. S., 25 bbls.	7⅞	2 ℔ ct
R. S., 10 bbls.	7⅞	1 ℔ ct
G. S., 50 bbls.	8⅝	4 ℔ ct
G. S., 25 bbls.	8⅝	2 ℔ ct
G. S., 10 bbls.	8⅝	1 ℔ ct
G. S. in poppy oil		11¾@12
R. S. in poppy oil		10½@11¼
American extra dry		4½@ 5
Florence, Green Seal		8 @ 8½
Florence, Red Seal		7½@ 8
German		6¾@ 7

Dry Colors.

REDS.

Carmine, No. 40	℔ lb.	2 15 @2 75
Crocus martus, imported		2½@ 3½
standard American		1 @ 2½
Indian red, standard American		3 @ 3¼
English		4½@ 8½
Rose pink, American		7 @ 9½
English		7½@ 9½
Tuscan red, English		7 @ 10
Turkey red, English		7½@ 10
Venetian red, English, prime		1¾@ 2
2d quality		1¼@ 1¾
American		60 @ 90
Vermilion, imported English		65 @ 80
Am. quicksilver, bulk		— @ 61
bags		— @ 62
Chinese		80 @ 90
American		10 @ 20

BLACKS.

Carbon	℔ lb.	6 @10
Drop, American		2½@ 4
English		5 @10
Ivory		9 @29
Lamp, commercial		3 @ 5
refined		8 @10
calcined		12 @20
fine spirit		20 @35

BLUES.

Celestial	℔ lb.	5½@ 8
Chinese		31 @36
Prussian		28 @30
Prussian Foreign		30 @32
Refiners'		60 @70
Soluble		33 @36
Ultramarine		7 @35
Verditer		25 @30

BROWNS.

Sienna, Italian, burnt & powdered		2¾@ 5
burnt lump	℔ lb.	1¾@ 3
raw, powdered		2¾@ 5
raw, lump		1¾@ 3
American burnt and powdered		1¾@ 1½
raw		1¾@ 1½
Spanish brown		¾@ 1
Umber, Turkey, burnt and powdered		2½@ 3½
burnt lumps		2½@ 4
raw and powdered		2½@ 3½
raw, lumps		2¼@ 2½
American, burnt		1¼@ 1½
raw		1¼@ 1½
Vandyke brown, German		2¼@ 5¾
American		1¾@ 2½

GREENS.

Chrome, chemically pure	℔ lb.	19 @25
extra		13 @15
super		10 @12
Chrome, common	℔ lb.	5 @ 6
Paris, pure		11 @14
in pulp		— @—
Verdigris, French		16 @20

YELLOWS.

Chrome	℔ lb.	10 @25
Ocher, Rochelle		1¼@ 1¾
washed Dutch		4¾@ 5
French		1¼@ 2½
golden		3½@ 4
domestic	℔ ton.	$10 00@15 00

Miscellaneous.

Barytes, prime white	℔ ton.	18 00 @20 00
foreign floated		20 00 @21 00
domestic floated		19 00 @20 00
off color		14 50 @17 00
Crude, No. 1		9 00 @10 00
No. 2		8 00 @ 8 25
No. 3		7 75 @ 8 00
Blanc fixe	℔ lb	2½@ 2¾
Bronze powder		45 @ 2 50
Brocades		45 @ 1 00
Chalk	℔ ton	2 15 @ 2 25
Clay, China, imported	℔ ton.	11 00 @17 00
domestic		8 50 @10 00
Cobalt oxide	℔ lb.	1 76 @ —
Feldspar	℔ ton.	12 50 @16 00
Fuller's Earth, lump	℔ 100 lbs.	75 @ 90
powdered		75 @ 90
Marble dust	℔ bbl.	75 @ 1 00
Manganese, car lots	℔ ton.	15 00 @17 00
jobbing	℔ lb.	3 @ 5
Magnesite, raw	℔ ton.	7 00 @ 8 00
calcined, pow'd.	℔ lb.	— @ 1¼
Plaster	℔ bbl.	— @ 1 40
dentists'		1 75 @ 2 00
Pumice stone, orig'l cks	℔ lb.	2 @ 2½
selected lumps in bbls		5 @ 15
pow'd pure, bbls.	℔ 100 lbs.	1 85 @ 2 50
Putty, in bulk		1 70 @ —
bladders		2 20 @ —
1 to 5 lb. tins		3 25 @ —
Rottenstone, casks	℔ lb.	6 @ 7½
selected, lumps		6 @ 14
powdered, in bbls		3½@ 3½
Silex	℔ ton.	12 00 @18 00
Smalt, German blue	℔ lb.	14 @ 15
super black		— @ —
Talc, American	℔ 100 lbs.	50 @ 65
French		1 10 @ 1 25
Italian		1 50 @ 2 00
Terra alba, American No. 2		50 @ 60
English		85 @ 1 00
French		80 @ 1 00
White, commercial		42½@ 50
gilders'		47 @ 56
extra gilders'		57 @ 64
American, Paris		65 @ 70
English cliffstone		75 @ 1 20

Glues.

Extra white	℔ lb.	16 @25
Medium white		14 @16
Cabinet		13 @16
Low grade		13 @15
Foot stock, white		11 @14
brown		10 @12
Irish		13 @15
French		12 @25
German hides		13 @16
common		10 @12½

Varnish Gums.

Asphaltum, Cuban prime	per lb.	4½@—
Egyptian		5¾@ 6½
Copal, Sierra Leone cleaned		60 @75
Zanzibar, bold white		60 @70
medium white		55 @65
bean and pea		33 @35
Manila, pale		15 @17
bright amber		10 @14
standard		8 7/10
Damar, Batavia		14 @15
Singapore		9 @12
Kauri, standard		24 @25
No. 2		19 @20
No. 3		14½@15
hard scraped		— @28½
light hard scraped		36 @40
picture quality		60 @63
pale and fine selected		— @50
Sandarac		— @18

Window Glass.

AMERICAN LIST.

Single.

United inches.	Sizes.	Prices per Fifty Feet. AA	A	B	C
25	6x 8 to 10x15	$17 50	$16 25	$15 50	$15 00
34	11x14 to 14x20	20 00	18 50	17 25	16 50
40	12x13 to 16x24	23 00	20 00	18 50	17 75
50	18x22 to 20x30	25 00	23 00	21 00	....
54	20x20 to 24x30	27 00	24 50	22 00	....
60	20x28 to 24x36	30 00	28 75	24 00	....
70	26x34 28x32 30x30 32x38 to 30x40	33 50	30 50	27 00	....
80	to 30x50	40 00	36 50	32 00	....
84	30x52 34x36 to 30x54	41 25	37 50	33 75	....

Double.

United inches.	Sizes.	Prices per 50 Ft. AA D	A D	B D
25	6x 8 to 10x15	$28 50	$22 00	$21 00
34	11x14 to 14x20	28 50	26 25	24 50
	12x13 to 14x20	28 50	26 25	24 50
40	10x26 to 16x24	31 25	28 50	26 25
50	18x22 to 20x30	34 50	31 75	28 75
	20x20 to 20x30	24 50	31 75	28 75
54	15x36 to 24x30	36 50	33 75	30 50
60	26x28 to 24x36	41 00	37 25	33 75
70	26x40 to 30x40	47 00	42 75	38 00
	28x32 to 30x40	47 00	42 75	38 00
	30x30 to 30x40	47 00	42 75	38 00
80	32x38 to 30x50	55 00	50 50	45 50
	34x36 to 30x50	55 00	50 50	45 50
84	30x52 to 30x54	57 00	51 75	46 50
90	30x56 to 34x56	58 50	54 00	48 50
94	34x58 to 34x60	63 00	57 50	52 00
100	36x60 to 40x60	66 50	60 50	50 00

Sizes above 100 inches $10.00 per box extra for every 5 inches. An additional 10 per cent. will be charged for all glass more than 40 inches wide. All sizes over 52 inches in length, and not making more than 81 united inches, will be charged in the 84 united inches bracket. Discount 30 and 20@35 per cent.

Metallic Paints.

Brown	16 00@20 00
Red	16 00@20 00

Colors in Oil.

Black coach Japan	℔ lb.	18½@20
in oil		12 @13
drop		12 @13
lampblack, prime		13 @14
medium		10 @11
Blue, Chinese		35 @40
Prussian		30 @35
ultramarine		12 @16
Brown, sienna, burnt		8 @13
raw		8 @13
umber, burnt		8 @12
raw		8 @12
Vandyke		8 @13
Green, chrome		8 @14
Paris		20 @24
Red, Indian		12 @15
Venetian		6 @ 8
Yellow, chrome		13 @15
ocher, French		6 @ 8

Drugs.

Opium.

Opium, natural (cases)	℔ lb.	3.10 @ —
as wanted		3.12½@ —
powdered		4.00 @ 4.20

Morphine.

Morphine, bulk	℔ oz.	1 95 @2 05
oz. vials		2 00 @2 10
¼ oz. vials, 2½ oz. boxes		2 20 @2 30
⅛ oz. vials, 1 oz. boxes		2 25 @2 35

Codeine.

Codeine, Pure, bulk, 5 oz.	℔ oz.	4.50 @4.65
ozs.		4.55 @4.70
eighths		4.75 @4.90
Salts, 45c. per oz. less than pure.		

Quinine.

Quinine, 100 oz. tins	@36
50 oz. tins	@36½
25 oz. tins	@37
5 oz. tins	@38
1 oz. tins	@41
1 oz. vials	@42
Cinchonidia, bulk	35 @36

Miscellaneous.

Acetanilid, in barrels	℔ lb.	28 @ 30
Acid, benzoic, true	℔ oz.	9 @ 9½
ex toluol	℔ lb.	46 @ 47
boracic, crystals, city		10¾@ 11
Calif.		10 @ 10¼
powdered, city		11¼@ 11½
Calif.		10¾@ 10¾
carbolic, drums		14½@ 15½
bottles		22 @ 23
tins		17½@ 19½
citric, barrels		41½@ 42
kegs		40 @ 42½
pyrogallic		1 95 @ 2 05
salicylic		38 @ 38
Alcohol, 94%	℔ gal.	2 44 @2 46
ref. wood, 95%		— @ 75
97%		— @ 80
purified		1 20 @ 1 50
Almond oil, sweet, almonds	℔ lb	37½@ 42
peach kernels		23 @ 26
Aloin		38 @ 40
Ambergris, black	℔ oz.	15 00 @17 50
grey		25 00 @26 50
Ammonia, carb., domestic	℔ lb.	8 @ 8½
foreign		7½@ 7¾
Antimony, needle		8 @ 8½
Areca Nuts		— @ 20
Arrowroot, Bermuda, genuine		40 @ 45
So-called		15 @ 22
St. Vincent, bbls		10½@ 13
cans		11½@ 14
Balm of Gilead Buds		— @ 30
Barium chloride		2¼@ —
chlorate		— @ 28
nitrate		6 @ 7
Barbadoes tar, in bbls	℔ gal.	40 @ —
Bay rum, bbls		2 25 @ —
Beeswax, white, pure	℔ lb.	45 @ 50
yellow		28 @ 30
Bismuth, citrate		— @ 1 75
subcarbonate		1 85 @ 1 40
subgallate		1 15 @ 1 25
subnitrate		1 20 @ 1 25
Blue Pill		37 @ 38
Borax		7¼@ 7¾
in bags		— @ 7
powdered		7¼@ 7¾
Bromine, bulk		45 @ 50
Burgundy pitch		2½@ 3
Caffeine		3 75 @ —
Calomel, American		75 @ 77
English		— @ 1 00
Cantharides, Chinese		45 @ —
powdered		45 @ 50
Russian		42 @ 45
powdered		50 @ 55
Carnauba wax, No. 1		20 @ 22
No. 2		13½@ 14½
No. 3		9½@ 10½
Castor oil, city, bbls		10½@ 11
cases		11 @ 11¼
Castile soap, white, pure		9¾@ 10
Marseilles		6½@ 7
green, pure		7¼@ 7½
ordinary		6 @ 6½
mottled, pure		5½@ 7½
ordinary		4½@ 5
Ceresin, yellow		10½@ 11½
white		11 @ 13½
Chalk, precip.		4 @ 6
Chloral hydrate, crusts, 28 lb. jars		— @ 1 15
crystals, 25 lb. j's		— @ 1 20
Chloroform		40 @ —
Clover Tops, red		7 @ 8
Cocaine, muri, bulk	oz.	3 25 @ 3 45
oz. vials		3 50 @ 3 80
Cocoa butter, 12 lb. boxes	℔ lb.	37 @ 39
bulk		30 @ 34

Codliver oil, Newfoundland	℔ gal	60	80
Norwegian	℔ bbl.	19 50	@21 50
Colocynth apples, Spanish	℔ lb.	16	@ 20
Trieste		35	@ 40
Corrosive sublimate		66	@ 68
Coumarin, refined		6 50	@ 8 00
Cuttlefish, Trieste		12	@ —
Cologne, spirit	190° ℔ gal.	1 30	@ 1 31
Dragon's blood, mass	℔ lb.	18	@ 35
reeds		65	@ 75
Epsom salts, per 100 lbs.		1 00	@ 1.05
Ergot, German		29	@ 30
Russian		29	@ 30
Spanish		38	@ 40
Ether, 1880		—	@ 60
washed		—	@ 64
1890		—	@ 66
Eucalyptol		—	@ 1 50
Formaldehyde		18	@ 18½
Fusel oil	℔ gal.	60	@ 75
Gelatine Silver	℔ lb.	27	@ 28
Gold		33	@ 45
Glucose, 41°		—	@ 1 42
Glycerine, C. P., drums		12½@	—
C. P., bbls.		13	@ —
C. P., cans		13½@	—
Dynamite		11	@ 11¼
Grape sugar, 70°		—	@ 1 42
Guarana		42½@	45
Haarlem oil, old style		2 18	@ 2 50
new style		2 68	@ 3 00
Hypophosphite, lime		1 05	@ 1 10
potash		1 05	@ 1 10
soda		1 05	@ 1 10
Iceland moss		5	@ 6
Insect powder		15	@ 27
Iodine, re-sublimed		2 90	@ 2 95
Iodoform		3 00	@ 3 05
Irish moss, ordinary		5	@ 8
bleached		10	@ 11
Isinglass, Russian		3 15	@ 3 25
American		45	@ 50
Japan wax		7	@ 7½
Kola Nuts, African		6½@	8
Licorice, mass, Greek		8	@ 12
Spanish		17	@ 24
stick, domestic		16½@	23½
foreign		23	@ 26
Lithia, carb.		3 30	@ —
Lupulin		18	@ 25
Lycopodium		29	@ 32
Manna, large flake		50	@ 55
small flake		23	@ 26
sorts		18	@ 22
Menthol		2 15	@ 2 30
Myrbane oil		9	@ 10
Musk, pods, Cab	℔ oz.	4 00	@ 6 00
Nepaul		21 00	@22 00
Tonquin		8 00	@15 00
grain, Cab		7 50	@ 8 50
Canton, extra		—	@ 1 00
good		18	@ 20
Nepaul		16 50	@17 50
Tonquin		17 00	@23 00
druggists'		15 50	@16 50
Mustard oil	℔ gal.	37	@ 38
Naphthaline, balls	℔ bbl.	3	@ 3½
crystals		2½@	2¾
flakes		2½@	3
Nux vomica		2½@	3
Phosphorus	℔ lb.	40	@ 1 00
Pilocarpine	℔ oz.	—	@ 7 00
Poppy heads	℔ lb.	15	@ 18
Precipitate, red	℔ lb.	85	@ 87
white		90	@ 92
Potash Perman		14	@ 15
Potassium, bromide, bulk		46	@ 47
cyanide "		28	@ 30
iodide "		2 15	@ 2 20
Quicksilver		59½@	60
Rochelle salts		—	@ 17½
Salicine, bulk		2 50	@ 2 55
Salol, bulk		3 00	@ 3 20
1 lb. bots.		3 10	@ 3 50
½ lb. bots.		3 15	@ 3 50
¼ lb. bots.		3 25	@ 3 65
ounces		25	@ 30
Santonine		2 05	@ 2 15
Seidlitz mixture		14	@ 14½
Sesame oil	℔ gal.	60	@ 70
Silver nitrate	℔ oz.	41	@ 42½
Spermaceti, blocks	℔ lb.	26	@ 26½
cakes		27	@ 27½
Strontia, nitrate		7¼@	7¾
St. John's Bread		2½@	3
Sugar of milk, cob		15	@ 16
powdered		10	@ 12
Sulphur, roll		2 00	@ —
flour		2 20	@ 2 25
Strychnine, bulk	℔ oz.	60	@ 75
Tamarinds	℔ keg.	2 05	@ 2 25
Thymol	℔ lb.	2 25	@ 2 50
Vanillin	℔ oz.	1 50	@ 1 65
Venice turpentine	℔ lb.	14	@ 17
Zinc chloride, gran.		5	@ 5½
sulphate		—	@ 2½

Balsams.

Copaiba—Central American		36	@ 37
Para		41	@ 42
Solidifiable		44	@ 45
Fir—Canada	℔ gal.	1 85	@ 1 95
Oregon		90	@ 1 00
Gurjun	℔ lb.	10	@ 15
Peru		1 85	@ 1 90
Tolu		29	@ 31

Barks.

Angostura	℔ lb.	8	@13
Bayberry		3¼@	3½
Black Haw, of root, true		6¾@	7
of tree		4	@ 5
Buckthorn		4¾@	5½
Cascara sagrada		5⅞@	6
Cascarilla		7½@	8
Canella		5	@ 7
Cherry		4	@ 6
Cinchona—Red, quills		18	@22
broken		12	@15
Yellow, quills		—	@20
broken		12	@15
Condorango		10	@12
Coto		12	@15
Cramp		5	@ 6
Dogwood, Jamaica		5½@	6½
Elm, common		8	@ 9
select		10¼@	11
Mesereon		8	@10
Oak, red		3	@ 4
white		3	@
Orange peel—bitter, Curacoa, quarters.		3	@ 3½
sweet, Malaga, pieces		7	@ 8
quarters.		9½	@10
sweet, Trieste		—	@ 5¼
Prickly ash		13	@15
Pomegranate of fruit		9	@11
of root		12	@13
Quebracho		10	@10 ½
Sassafrass		6	@ 8
Simaruba		10	@12
Soap, whole		3½@	5½
crushed		5½@	7
Wahoo, of root		16	@20
of tree		7	@10
White Pine		—	@ 4
White Poplar		3½@	4
Wild Cherry		4	@ 6
Witch Hazel		3	@ 4

Beans.

Calabar	℔ lb.	8	@ 12
St. Ignatius		15	@ 20
Tonca—Angostura		75	@ 85
Para		12	@ 15
Surinam		45	@ 50
Vanilla—Mexican, whole		11 00	@16 00
cuts		9 00	@ 9 50
Bourbon, whole		4 00	@ 9 00
Tahiti, whole		2 10	@ 2 30

Berries.

Cubeb	℔ lb.	6	@ 8
Fish (Coculus Indicus)		3	@ 3½
Juniper		2½@	2⅝
Laurel		4	@ 5
Prickly ash		10	@15
Saw Palmetto		—	@ 6

Essential Oils.

Almond—bitter	℔ lb.	4 00	@ 6 00
artificial		75	@ 1 00
Amber—crude		13	@ 15
rectified		22	@ 23
Anise		1 42½	@1 45
Bay		2 50	@ 3 00
Bergamot		1 90	@ 2 15
Birch, sweet		1 20	@ 1 25
Birch Tar, crude		15	@ 18
extra		25	@ 30
Cade		15	@ 25
Cajeput		52½@	57½
Camphor		5	@ 6
Caraway seed		1 00	@ 1 15
Cassia		77½@	1 05
Cedar leaf		35	@ 40
wood		—	@ 25
Cinnamon, Ceylon, heavy		8 00	@ 9 00
Citronella		23	@ 24
Cloves		50	@ 55
Copaiba		80	@ —
Coriander		7 25	@11 00
Crotch		1 00	@ 1 10
Cubeb		70	@ 75
Cummin		3 00	@ —
Erigeron		70	@ 75
Eucalyptus, American		45	@ 60
Australian		70	@ 75
Fennel seed		—	@ 1 25
Geranium rose, African		5 50	@ 6 50
Turkish		2 25	@ 2 50
French		—	@11 00
Ginger		—	@ 4 50
Gingergrass		1 00	@ 1 10
Hemlock		33	@ 35
Juniper berries—rectified		—	@ 1 00
twice rectified		—	@ 1 20
wood		25	@ 30
Lavender, cultivated		1 90	@ 2 00
flowers		1 20	@ 1 60
aspic, pure		—	@ 1 00
spike		75	@ 90
garden		35	@ 55
Lemon		80	@ 95
Lemongrass, native		—	@ 1 20
Linaloe		1 40	@ 1 50
Mace		—	@ 1 15
Malefern		1 50	@ 1 75
Mustard—natural		5 00	@ 6 00
artificial		2 50	@ 3 75
Neroli—petale		—	@25 00
bigarade		20 00	@24 00
Nutmeg		1 25	@ —
Orange, bitter		2 65	@ 3 00
sweet		1 75	@ 1 95
Origanum		21	@ 23
Patchouly—leaf		—	@ 5 00
cultivated		—	@ 6 00
Peppermint—tins		85	@ 1 05
bottles		1 10	@ 1 15
Pennyroyal		95	@ 1 05
Petit grains, French		4 00	@ 4 25
American		1 70	@ 1 75
Pimento		3 00	@ 3 25
Rhodium		2 00	@ 7 00
Rose	℔ oz.	4 75	@ 5 50
Rosemary flowers, French	℔ lb.	75	@ 1 10
Trieste		—	@ 50
Sandalwood—East India		3 25	@ 3 75
West India		1 75	@ 2 00
Australian		—	@ 3 25
Sassafras—natural		32	@ 35
artificial		27	@ 29
Saffrol		35	@ 40
Savin		90	@ 1 30
Spearmint		85	@ 95
Spruce		28	@ 30
Tansy		85	@ 90
Thyme—red, French		80	@ 90
white, French		1 00	@ 1 20
Wintergreen—nat'l (sweet birch)		1 20	@ 1 25
artificial		47½@	50
leaf		1 65	@ —
Wormseed—Baltimore		2 00	@ —
Wormwood, pure		3 75	@ 4 25
Ylang ylang		48 00	@72 00

Flowers.

Arnica		7¾@	8
Calendula, foreign		—	@ 45
Chamomile, Belgian		16	@ 18
German		28	@ 30
Hungarian		19	@ 22
Insect		15	@ 30
Lavender, ordinary		3	@ 5
select		6½@	10
Poppy, red		—	@ 35
Rosemary		15	@ 16
Saffron, American		9½@	10¼
Alicante		4 90	@ 5 25
Valencia		10 75	@11 00

Gums.

Aloes, Curacao, in gourds	℔ lb.	4½@	5
Cape		5¼@	6
Curacao		3½@	3¾
Socotrine		20	@ 24
Ammoniac		20	@ —
Arabics, Firsts		33	@ 36
Seconds		33	@ 36
Thirds		27	@ 28
Fourths		22	@ 24
Siftings		—	@ 15
Sorts		16½@	17½
Asafoetida		16	@ 22
Benzoin		25	@ 30
Camphor, American bbls		44½@	45
cases		45	@ 45½
ounces		45½@	46
Japan		45	@ 47
Chicle		26	@ 28
Euphorbium		15	@ —
Galbanum		70	@ 75
Gamboge		31	@ 36
Guaiac		11	@ 15
Kino		1 90	@ 2 00
Mastic		41	@ 44
Myrrh		15½@	23
Olibanum, siftings		4	@ 4½
sorts		5½@	—
tears		8½@	9
Sandarac		16	@ 20
Scammony, resin		—	@ 2 25
Aleppo		2 75	@ 2 90
Virgin		4 00	@ 6 50
Senegal, picked		18	@ 24
sorts		—	@ 13
Tragacanth, Aleppo, Firsts		—	@ 65
Seconds		45	@ 52
Thirds		35	@ 40
Fourths		27	@ 32
Turkey, Firsts		65	@ 85
Seconds		50	@ 60
Thirds		45	@ 50

Herbs and Leaves.

Aconite	℔ lb.	8	@10
Althea		—	@10
Belladonna		11	@12
Buchu, short		13	@15
long		16	@18
Cannabis Indica		13½	@15½
Coca, Huanoco		22	@25
Truxillo		20	@ 22
Coltsfoot		8	@—
Conium		—	@ 7
Deer Tongue		4	@ 5
Damiana		7½@	8
Digitalis		10½@	11
Doggrass		6½@	7½
Eucalyptus		4	@—
Grindelia robusta		6	@ 6½
Henbane (hyosciamus)		10½@	12
Horehound		—	@ 5
Jaborandi		8	@10
Laurel		3¼@	3¾
Lobelia		—	@ 5½
Matico		9	@10
Marjoram, German		17	@18
French		8½@	10
Pennyroyal		—	@ 8½
Peppermint, American		—	@ 7
German		—	@25
Pichi, tops		15	@20
Pulsatilla		20	@22
Prince's pine		—	@ 8
Rose, red		90	@1 00
pale		11	@12
Rosemary		—	@ 4
Rue		13	@16
Sage, Italian picked		3	@ 3¼
Savory		5	@ 5½
Scullicap		9	@11
Squaw Vine		7	@ 8
Senna, Alex, whole leaf		24	@26
half leaf		12	@14
siftings		6¼@	7½
Tinnevelly		7½	@14
Stramonium		7	@ 8
Thyme		3¾@	4
Uva Ursi		4	@4¼
Witch Hazel		3¾@	4
Wormwood, foreign		5½@	7
Yerba Santa		5	@ 6

Roots.

Aconite, German	℔ lb.	11½@	12½
Alkanet		5¾@	6½
Althea, whole		12½@	13
cut		15	@ 17
Angelica, German		14	@ 15
American		7	@ 8
Arnica		14	@ 16
Belladonna, Atropia		10	@ 12
Scopalia		9	@ 10
Berberis Aquifolium		9	@ 10
Bitter		—	@ 11
Blood		6½@	7½
Blueflag		7	@ 9
Byronia		8	@ 9
Burdock		7	@ 8
Calamus, bleached		28	@ 30
unbleached		7	@ 8
Cohosh, black		3½@	4½
blue		—	@ 5
Colchicum		8	@ 9
Colombo		7	@ 9
Culvers		10	@ 12
Dandelion, German		8¾@	9½
Elecampane		4	@ 4½
Galangal		6	@ 7
Gelsemium		5½@	6½
Gentian		3½@	4
Ginseng, Southern		2 70	@3 25
Northern		4 25	@4 50
Northwestern		3 75	@4 00
Ginger, Jamaica, unbleached		11½@	17
bleached		17	@ 19
Golden Seal		40	@ 55
Hellebore, white		6	@ 8
black		5	@ 6
powdered		9	& 10
Hydrangea		—	@ 5
Ipecac, Rio		3 90	@4 25
Jalap		10½@	11¼
Kava Kava		13	@ 15
Lady Slipper		—	@ 18
Licorice, ordinary bdls		3½@	4
selected bdls		7	@ 7½
Lovage, American		—	@ 22
German		—	@ 9
Mandrake		3¾@	4
Musk, Russian		—	@ 14
Orris, Florentine, bold		8	@ 9
small		7	@ 7½
Verona		5	@ 7
fingers		60	@ 65
Pareira brava		7½@	10
Pellitory		15	@ 16
Pink		19¼@	20
Pleuresy		9	@ 10
Poke		3½@	4½
Rhatany		10	@ 15
Rhubarb, Canton		25	@ 40
Shensi		50	@ 60
High dried		17½@	30
clippings		17	@ 30
Sarsaparilla, Honduras		30	@ 35
Mexican		9½@	10
Senega, Southern		27	@ 28
Western		25	@ 26
Skunk Cabbage		7½@	8
Snake, Canada		22	@ 25
Texas		27	@ 30
Virginia		35	@ 38
Stillingia		4½@	5
Stone		4	@ 5
Squills		3¾@	4
Unicorn, false		20	@ 23
true		—	@ 22
Valerian, German		12	@ 14
Belgian		9	@ 10
English		12	@ 20
Wild Yam		5½@	6
Yellow Dock		—	@ 4½
Zedoary		9	@ 10

Seeds.

Anise, Italian, sifted	℔ lb.	7½@	8
Russian		4½@	4¾
star		23	@ 24
Canary, Sicily		2¾@	2¾
Smyrna		2½@	2¾
Caraway, Dutch		5½@	5¾
Cardamoms, Bleached		65	@1.05
Decorticated		75	@ 85
Celery		6¼@	6½
Colchicum, German		16	@ 17
Conium		6	@ 7
Coriander, natural		2½@	2¾
bleached		2¾@	2¾
Cummin, Malta		6½@	7
Fennel, German		—	@ 10
Italian		4½@	5
Flax	℔ bbl.	5.25	@5 50
ground	℔ lb.	3	@ 3¼
Foenugreek		—	@ 3
Guinea grains		14	@ 16
Hemp, Russian		3¼@	3½
Larkspur		30	@ 33
Lobella		17	@ 20
Millet		1¾@	1¾
Mustard, brown, Bari		6	@ —
Cal.		4¾@	5
Sicily		5	@ 5¼
Trieste		7¾@	8
yellow, Cal.		3¾@	4
English		5½@	5¾
German		3¼@	3½
Poppy, blue		7½@	7¾
Quince, German		40	@ 45
Rape, English		3½@	4
German		3	@ 3¼
domestic		2¼@	2¾
Sabadilla		10	@ 12
Stavesacre		—	@ 15
Stramonium		—	@ 8
Strophanthus		30	@ 90
Sunflower		5	@ 5¼
Worm, Levant		6	@ 6½
American		5	@ 7

Shellac.

D. C.	℔ lb.	26	@28
V. S. O.		24	@—
Triangle G.		23	@—
S. S.		20	@21
S. D.		21	@22
T. N.		14¼	@16½
Garnet, A. C.		15	@16
Button		20	@25
Bleached		16	@17

Spices.

Cassia, Batavia, No. 1	℔ lb.	17	@17½
broken		11½	@14
Canton, matted rolls		8	@ 8½
broken		5½	@ 5¾
Saigon, rolls		45½	@46½
broken		35	@36
Buds		25	@26
Cloves, Amboyna		10½	@10¾
Zanzibar		6¾	@ 7
stems		2½	@ 2¾
Ginger, African		4¼	@ 4½
Calcutta		4¾	@ 4¾
Cochin, A B C		5¼	@ 5¾
D		4½	@ 5
Mace Banda		39	@41
Batavia		28½	@34
Penang		38	@41
Nutmegs, 11's		26½	@27½
Pepper, black, Acheen		10¾	@10¾
Singapore		11	@11¾
West Coast Sumatra		10¾	@11
white, Penang		16¾	@16¾
Singapore		18¼	@18¾
red, capsicums		9	@ 9¾
Zanzibar		10½	@10¾
Pimento, Jamaica, prime		6¾	@ 7

Chemicals.

Heavy Chemicals.

Alkali, 48 ℔ cent., Solvay,	℔ 100 lbs.	1 90	@ 1 95
ammonia, high test		70	@ 85
Bleach, over 35 ℔ cent.		1 25	@1 45
Salt cake		60	@ 65
Soda ash, carb., 48 per cent.		90	@ 95
high test		75	@ 80
caustic, 48 per cent.		1 50	@ 1 60
Newcastle, 48 per cent.		—	@ —
high test		—	@ —
Soda, bicarb., English		1 50	@ 2 00
American		1 15	@ 2 50
crystal carbonate		1 00	@ 1 15

Caustic solvay 60 % cent.,			
	% 100 lbs.	1 80 @	1 90
	76 " "	1 45 @	1 55
	74 " "	1 50 @	1 65
foreign caustic, 60 % cent		1 75 @	2 00
	70 " "	1 60 @	1 70
	74 " "	1 65 @	1 75
	76 " "	1 70 @	1 80
York, Granulated, % 100 lbs.			
60 % cent		2½@	2¼
70 " "		2¼@	2⅜
74 " "		2⅜@	2½
A. C. P.		2⅜@	3
Sal, English		62½@	65
American		70 @	80

Acids.

Acid acetic	% 100 lbs.	1¼@	1⅝
chemically pure	% lb.	20 @	21
oxalic		6¼@	6½
pyroligneous		9 @	12
sulphuric, 60 deg.	% 100 lbs	90 @	1 20
66 deg.		1 20 @	1 75
bulk, 50 deg.		12 00 @	12 50
muriatic, 18 deg.		1 20 @	1 25
20 deg.		1 35 @	1 85
22 deg.		1 30 @	2 25
aqua fortis, 36 deg.	% lb	4⅝@	5¼
38 deg.		4⅞@	5⅜
40 deg.		5⅛@	5⅝
42 deg.		5½@	5⅞
nitric, 36 deg.		3⅝@	4⅜
38 deg.		4⅛@	4⅝
40 deg.		4⅝@	4⅞
42 deg.		4⅞@	5¼
tartaric, crystals		31½@	32
powdered		32 @	32½

Miscellaneous Chemicals.

Acetate of lime, gray	% 100 lbs.	1 25 @	1 90
brown		80 @	85
Alum, lump		1 65 @	1 75
ground		1 75 @	1 85
porous		1 75 @	2 00
Argols, plates	% lb.	23 @	—
red		2¼@	2½
Arsenic, white		4½@	4¾
red		7¾@	8½
Brimstone, crude, 2ds	% ton.	20 50 @	21 50
3ds		18 50 @	19 50
Cream tartar, crystals, p. c.	% lb.	22¾@	23
powdered, 99 p. c.		23½@	24
Chloride of calcium		95 @	1 00
Copperas		62½@	70
Glauber salts		65 @	85
Nitrate of lead		6¾@	7
soda		1 60 @	1 65
Chlorate of soda		9⅞@	10
Sugar of lead, brown		5¼@	5½
white		7½@	7¾
Saltpeter, crude		3½@	3⅝
refined		4 @	5¼
Sulphate alumina		1¼@	1½
Vitriol, blue		5½@	6

Ammoniates, Potashes' Etc.

Ashes, pot, 1st sorts	% lb.	3½@	3¾
pearl		5 @	5¼
Potash, chlorate		9¼@	9½
powdered		9¾@	10⅛
carb.		3½@	5½
caustic		4½@	5½
dbl m'ure salt 48@53 %c.		1 02 @	1 05½
dbl m'ure salt 48@53 %c. less than 25 tons		25 00 @	32 00
sulph. of basis 90@98%c.		1 97½@	2 02½
90@98 % cent less than 25 tons		39 00 @	41 00
Kainit, 25 % cent. S. of P	% ton	8 70 @	10 15
less than 25 tons		9 75 @	13 00
Sylvinit, 35@37 % ct. P	% unit.	36½@	39
Aq. am'ia (in cbys) 16 deg.	% lb.	3¾@	4
18 deg.		4 @	4½
20 deg.		5 @	5½
26 deg.		5¾@	6½
Ammoniac, sal, gray		5¼@	5⅝
granulated		5¾@	—
lump		8¼@	8½
Ammonia sulphate		3 10 @	3 15
Potash, muriate	% 100 lbs.	1 78 @	1 84
less than 25 tons		38 00 @	42 00
Ammoniates, Etc.:			
Blood, dried, red, per unit		1 90 @	1 95
low grade		1 85 @	1 90
Concentrated tankage		1 80 @	1 85
Bones, rough	% ton.	20 00 @	21 00
ground		21 50 @	22 00
Bone meal		21 50 @	24 00
Bone black, refuse		18 50 @	19 50
Fish guano, dried		19 00 @	19 50
acidulated		10 00 @	10 50
Phosphate rock, f. o. b. Char'n.		3 25 @	3 75
f. o. b. Peace River		2 50 @	3 00
Land Pebble, 70 % cent		3 00 @	3 25
Acid phosphate, 15@18 % cent		60 @	65

Dyestuffs.

Acid, picric, best crystals	% lb.	23 @	26
tannic, commercial		32½@	40
crystals		70 @	80
Acetate of soda		4 @	6
Albumen, egg		62 @	68
blood		15 @	16½
Alizarine		12 @	18
Aniline oil		9¾@	9½
salt, crystals		7¾@	8½
Annatto		10 @	25
seed		— @	5½
Antimony, oxymuriate		4 @	6
salt, 65 per cent		16 @	17
47 per cent		13½@	15
tartar emetic		22½@	30
Bichloride tin		8½@	12
Bichromate of potash, Scotch		9½@	9¾
American		9½@	9¾
Bichromate of soda		7½@	7¾
Bisulphite of soda		1½@	2¼
Carmine of Indigo		60 @	75
Cochineal, Teneriffe, silver		23 @	24
black		24 @	25
gray black		32 @	33
Cudbear, French		12 @	18
concentrated		23 @	25
English		10 @	18
Cutch, mat.		4 @	5
ordinary in boxes		4½@	7
fine in boxes		7½@	9
Dextrine, imported		5¾@	6¼
domestic		5½@	6
corn		2½@	3
Divi Divi	% ton.	42 50 @	45 00
Flavine	% lb.	18 @	25
Fustic stick	% ton.	11 00 @	18 00
Gambier	% lb.	2 85 @	3¼
Cube, No. 1		4½@	5
No. 2		3¾@	4
Garancine		6 @	8
Hypo. of soda, cks	% 100 lbs.	1 65 @	1 85
kgs.		1 85 @	2 25
Indigo, Bengal, low grade	% lb.	62½@	67½
medium		70 @	82½
high grade		85 @	1 25
Kurpahs, medium to good		55 @	65
higher grades		67½@	82½
Guatemalas		45 @	1 00
Manila		35 @	55
Madras		25 @	40
J (Synthetic)		— @	38
Indigotine		95 @	1 80
Logwood stick	% ton.	17 00 @	22 00
Madder, Dutch	% lb.	5 @	10
French		6 @	7½
Myrabolans		2 @	3
Muriate of tin		6 @	10
Nitrate of iron, commercial		1¼@	1⅝
true		4 @	4½
Nutgalls, blue Aleppo		15½@	16½
Chinese		15 @	15½
Persian berries		6½@	8
Prussiate of potash, yellow		19 @	19½
red		37 @	40
Prussiate of soda		16½@	17
Phosphate of soda		2⅞@	3½
Quercitron	% ton.	— @	18 00
Sago flour	% lb.	3¾@	4
Salts of tartar		5½@	7
Silicate Soda		1 @	2
Soluble oil, 50 per cent		7 @	8
75 per cent		11 @	12
Starch, corn, pearl, in bbls	% lb.	1 44 @	1 65
potato		4½@	4¾
rice		7½@	9
wheat		5 @	6
Stannate of soda		8 @	13
Sumac, Sicily, No. 1	% ton.	55 00 @	57 00
No. 2		53 00 @	55 00
Virginia		— @	40 00
Tin crystals	% lb.	20 @	21½
Tapioca flour		4¾@	5
Vanadiate ammonium	% oz.	— @	60
Zinc Dust	% lb.	7½@	7⅝

Chipped Dyewoods, Etc.

Barwood	% lb.	2 @	2¼
Camwood		6 @	8
Fustic, Jamaica		1¼@	1½
Cuban		1½@	—
Hypernic		3 @	3¼
Logwood, Campeche		1⅝@	1¾
Red sanders		2¾@	3
Turmeric, ground		6 @	7
powdered		7½@	8

Extracts.

Archil, double	% lb.	8 @	13
concentrated		14 @	18
Barberry, French		22 @	28
Chestnut		2½@	4½
oak		2¾@	3¼
Hemlock		2½@	4½
Fustic, solid		8½@	10
liquid, 51 deg.		6 @	10
Gall		15 @	18
Indigo		6½@	15
Logwood, solid		6½@	12
liquid, 51 deg.		4½@	10
42 deg.		4 @	7
Persian Berry		12 @	15
Sumac		3 @	6

Comparative Prices.

On July 10, 1896, 1897 and 1898.

Chemicals.	1898.	1897.	1896.
Bleaching powder	$1 40	$1 45	$1 60
Brimstone, 3ds	22 00	19 00	18 00
Caustic soda, 70 p. c.	1 60	1 90	2⅛
Caustic soda, 60 p. c.	1 75	2 25	2 37½
Sal soda, Am.	55	65	65
Soda ash, 48 p. c. carb.	75	90	1 10
Soda ash, 48 p.c.caustic	1 50	1 10	1 25
Soda, alkali, 48 p. c.	65	85	80
Soda, nitrate	1 57½	1 67½	1 77½
Cream tartar, crystals	24½	22½	26
Muriate of potash	1 78	1 78	1 78
Chlorate of potash	8¾	9	8½
Kainit	8 80	8 80	8 80
Paints.			
White lead in oil	5¼	5¼	5¼
Litharge, Am. pow'd	4¾	4½	4¼
Paris green	14½	11½	12¼
Orange mineral	7¼	6½	6½
Ven. red, English	1 50	1 50	1 50
Ven red, American	60	60	60
Barytes	$12 00	$14 00	$14 00
Whiting, commercial	35	35	40
Drugs.			
Opium	3 50	2 35	2 00
Morphine, domestic	1 90	1 50	1 35
Quinine	20	15	26
Alcohol	2 37	2 29	2 31
Borax, city	7	5¼	5¾
Beans tonca (Ang.)	1 40	1 65	2 10
Cubeb, XX.	6	6	7
Cuttlefish	7½	8	8½
Glycerine, C. P. drums	13	12	16¼
Oil, castor, city	12	12	9½
Oil, codliver, Nor	25 00	22 00	52 00
Oil, cassia	95	1 25	1 50
Oil, peppermint, tins	85	1 10	1 50
Oil, sassafras	31	35	40
Quicksilver	57	52	49
Asafoetida	15	14	12
Gum, arabic, sorts	17	19	21
Camphor, bbls	34½	39	40
Shellac, D. C.	26	25	28½
Senna, Alex. Nat'l	15	15	16
Senega root	30	35	28
Ipecac	2 30	1 60	1 35
Jalap	9½	10	11
Canary seed, Smyrna	2 1-16	1¾	1¾
Caraway seed, Dutch	5	4¾	5¼
Mustard seed Cal. yel.	5¼	2¾	2¾
Rapeseed, German	3	2½	2¼
Oils.			
Cottonseed, prime S. Y.	23½	24	24½
Olive, Sicily	48	50	48
Cocoanut, Ceylon	5¼	6	5¼
Lard, prime city	49	34	38
Linseed, domestic	41	29	35
Menhaden, prime crude	23	20	20
Whale, bl'ch'd winter	53	46	40
Sperm, bl'ch'd winter	70	48	40
Oil cake, Western	20 00	19 00	16 00
Spirits turpentine	26	26½	24¾
Dyestuffs.			
Bichromate, potash Am.	9¾	10	10
Cochineal, Teneriffe S.	25	26	28
Cutch, bag	3½	5	4½
Gambier	2 75	2 70	3 60
Indigo, Bengal, h gde	90	1 00	1 10
Prussiate potash, yellow	15½	13½	16
Sumac, Sicily, prime	44 00	37 00	46 00
Starch, corn	1 32	1 12½	2 00

IMPORTS ENTERED IN NEW YORK FOR CONSUMPTION.

Week Ending July 7.

ACID, CARBOLIC—20 cks, 800 gals, A L Page, Georgic, Liverpool
85 pkgs, 15,051 gals, Schoellkopf, H & M, Georgic, Liverpool
20 cs, Schoellkopf, H & M, Manitou, London
37 cks, 1,977 lbs, Albany Chem Co, Georgic, Liverpool
10 dms, Lehn & Fink, Menominee, London
FORMIC—14 cks, D D Williamson, Fr der Grosse, Bremen
OXALIC—30 cks, Peckhardt & K, Kensington, Antwerp
20 cks, C Bischoff & Co, Patricia, Hamburg
50 cks, A Klipstein & Co, Wells City, Swansea
[Correction.—15 cks reported to A Klipstein & Co in issue of June 12 should be Jas Lee & Co, which is reported in issue of June 26]
VALERIANIC—10 cs, Schoellkopf, H & M, Patricia, Hamburg
ALCOHOL—6 cks, Davis, Lawrence & Co, Patricia, Hamburg
ALIZARINE—36 cks, V Koechl Co, Maasdam, Rotterdam
91 cks, Farb of Elberfeld Co, Kensington, Antwerp
BLUE—2 cks, C Bischoff & Co, K Wm der Grosse, Bremen
BROWN—9 cks, C Bischoff & Co, Georgic, Liverpool
ALUMNIA, SULPH—28 cks, A Klipstein & Co, Kensington, Antwerp
AMMONIA, MURI—26 cks, A Klipstein & Co, Kensington, Antwerp
SAL—140 cks, A Klipstein & Co, Kensington, Antwerp
SULPH—516 bgs, H J Baker & Bro, Georgic, Liverpool
524 bgs, 114,010 lbs, Parsons & Petit, Aurania, Liverpool
ANGLICA ROOT—1 bl, Lehn & Fink, Patricia, Hamburg
ANILINE COLORS—60 cks, V Koechl Co, Maasdam, Rotterdam
8 bbls, F Bredt & Co, Georgic, Liverpool
6 cks, Geisenheimer & Co, Maasdam, Rot'm
10 cks, Geisenheimer & Co, Fr der Grosse, Bremen
7 cks, V Koechl Co, Fr der Grosse, Bremen
2 cks, A Klipstein & Co, Georgic, Liverpool
18 cks, Sykes & Street, Kensington, Antw'p
158 pkgs, Farb of Elberfeld Co, Kensington, Antwerp
22 pkgs, J J Keller & Co, Kensington, Ant'p
84 cks, Pickhardt & K, Kensington, Antwerp
32 cks, A Klipstein & Co, Kensington, Ant'p
6 cks, Heller & Merz Co, Kensington, Ant'p
10 cks, O Hann & Bro, Kensington, Antw'p
24 cks, F Bredt & Co, Kensington, Antwerp
10 cks, B P Ducas Co, Georgic, Liverpool
56 cks, Berlin Aniline Works, Patricia, Hbg
24 cks, C Bischoff & Co, Fk der Grosse, Bremen
5 cks, F Bredt & Co, Cymric, Liverpool
OIL—8 dms, J A & W Bird & Co, Idaho, Hull
18 dms, 21,419 lbs, A Klipstein & Co, Idaho, Hull
26 dms, J A & W Bird & Co, Buffalo, Hull
2 dms, A Klipstein & Co, Buffalo, Hull
SALT—40 cks, V Koechl & Co, Kensington, Antwerp
19 cs, 38 cks, C Bischoff & Co, Kensington, Antwerp
ANTIMONY, REG—70 cks, 47,040 lbs, Am Metal Co, St Paul, Southampton
ARGOLS—397 pkgs, 101,795 lbs, Tartar Chem Co, Pocahontas, Bari
242 bgs, 55,836 lbs, C Pfizer & Co, Hesperia, Leghorn
217 bgs, 49,482 lbs, C Pfizer & Co, Pocahontas, Bari
121 bgs, 54,380 lbs, Tartar Chem Co, Hesperia, Leghorn
31 cks, 33,122 lbs, Tartar Chem Co, Georgic, Liverpool
412 cks, 45,788 lbs, Tartar Chem Co, Britannia, Naples
326 bgs, Tartar Chem Co, Panama, Bordeaux
181 cks, Tartar Chem Co, Panama, Bordeaux
233 bgs, Tartar Chem Co, Gottfried Schenker, Messina
13 cks, Tartar Chem Co, Gottfried Schenker, Messina
66 bgs, W R Peters & Co, Britannia, Marseilles
ARROWROOT—30 bbls, Leaycroft & Co, Fontabelle, Barbados
ARSENIC, RED—100 cks, 22,046 lbs, O Hann & Bro, Island, Stettin
BALSAM—9 cks, 4,191 lbs, Dodge & Olcott, Olbers, Bahia
7 bbls, 1,200 lbs, Kunhardt & Co, Alleghany, Cartagena
COP—5 cs, 400 lbs, Flint, Eddy & Co, Irrawaddy, C Bolivar
2 cs, 172 lbs, Punderford & Co, Irrawaddy, C Bolivar
7 cs, 924 lbs, Punderford & Co, Alleghany, Cartagena
BARIUM, BINOXIDE—12 cks, Oakland Chem Co, Maasdam, Rotterdam
BARYTES, CARB—52 tons, Hammill & Gillespie, Salerno, Newcastle
SULPH—5 cks, 4,480 lbs, Pickhardt & K, Manitou, London
BISMUTH—8 pkgs, 2,246 lbs, McKesson & Robbins, Manitou, London
1 cs, 1 bbl, Lehn & Fink, St Louis, S'h'ton
BLANC FIXE—10 cks, Pickhardt & K, Patricia, Hamburg
BLEACH—153 cks, J L & D S Riker, Georgic, Liverpool
65 bbls, 66,780 lbs, F A Richard, Kensington, Antwerp
91 bbls, Fuerst Bros & Co, Kensington, Ant
24 cs, A Klipstein & Co, Georgic, Liverpool
168 cks, 135,021 lbs, J L & D S Riker, Salerno, New Castle
18 cks, J L & D S Riker, Cymric, Liverpool
37 cks, 15,436 lbs, A Klipstein & Co, Br King, Antwerp
BLUE—5 cs, Jaenecke Bros & F S, Fr der Grosse, Bremen
BONES—550 bgs, Flint, Eddy & Co, Matanzas, Tampico
304 bgs, J W Wupperman, Matanzas, Tampico
BONE SIZE—10 cks, A de Ronde & Co, Cymric, Liverpool
BRIMSTONE—800 tons, Parsons & Petit, Stag, Licato
1,000 tons, A S Malcomson, Lisnacrieve, Girgenti
BRISTLES—15 pkgs, 3,543 lbs, F W Von Stade, La Champagne, Havre
7 cks, 3,207 lbs, Lewisohn Imp & Tr Co., St Louis, Southampton
7 cs, 933 lbs, Wells, Fargo & Co, St Louis, Southampton
55 cs, Rump & Cattus, Coastwise, Shanghai
12 pkgs, 4,919 lbs, F W Von Stade, Patricia, Hamburg
5 cks, 2,538 lbs, H Conheim, Patricia, Hamburg
4 cks, 1,770 lbs, H Kroehl, Patricia, Hamburg
3 cks, Polack & Goldstein, Patricia, Hamburg
23 cks, 11,187 lbs, E & H Levy, Kaiser Wm der Grosse, Bremen
BRONZE POWDER—4 cs, T Reissner, Fr der Grosse, Bremen
2 cs, J Marsching & Co, Fr der Grosse Bremen
25 cs, Baer Bros, Fr der Grosse, Bremen
1 cs, G Meier & Co, Fr der Grosse, Bremen
1 cs, Fuchs & L Mfg Co, Fr der Grosse, Bremen
12 cs, W H Kemp, Fr der Grosse, Bremen
BUCHU LEAVES—27 bls, Schoellkopf, H & M, Manitou, London
CALCIUM CHLO—40 dms, A Klipstein & Co, Georgic, Liverpool
CANARY SEED—150 bgs, J D Nordlinger, Pocahontas, Trieste
CANTHARIDES—3 cks, 514 lbs, Schieffelin & Co, Patricia, Hamburg
CARDAMOMS—4 cs, Schieffelin & Co, St Paul, Southampton
2 cs, McKesson & Robbins, Manitou, London
6 cs, Parke, Davis & Co, Manitou, London
CARAWAY SEED—25 bls, 2,750 lbs, D R James & Bro, Werkendam, Rotterdam
CASSIA—50 pkgs, D A Shaw & Co, Werkendam, Rotterdam
140 pkgs, F H Leggett & Co, Werkendam, Rotterdam
CHALK—900 tons, J F Whitney & Co, Clan McLeod, London
PRECIP—15 cks, 10 cs, Lehn & Fink, Georgic, Liverpool
CHAMOMILES—5 cs, Lehn & Fink, Patricia, Hamburg
CHEMICALS—43 cs, E Levi, Maasdam, Rdm
54 pkgs, Merck & Co, Maasdam, Rdm
16 pkgs, 30 cks, Elmer & Amend, Patricia, Hamburg
COMPOUND—55 cks, Roessler & H Chem Co, Maasdam, Rotterdam
10 cs, E Levi, Fr der Grosse, Bremen
70 demj, Merck & Co, Fr der Grosse, Bmn
9 cs, 5 kgs, Richards & Co, Patricia, Hbg
94 cs, 23 crates, Schering & Glatz, Patricia, Hamburg
PREP—1 cs, V Koechl Co, Maasdam, Rotterdam
4 cs, Fries Bros, La Gascogne, Havre
30 cs, V Koechl Co, Fr der Grosse, Bremen
4 cs, Merck & Co, Kaiser Wm der Grosse, Bremen
4 cks, C Bischoff & Co, Kensington, Ant
13 cs, Elmer & Amend, Patricia, Hamburg
6 cs, Lehn & Fink, Patricia, Hamburg
5 cs, Lehn & Fink, St Louis, Southampton
SALT—40 cs, Merck & Co, St Paul, Southampton
20 cks, Pickhardt & K, Kensington, Ant
18 cks, A Klipstein & Co, Kensington, Ant
5 bbls, 3 cs, Lehn & Fink, Patricia, Hbg
CHINA CLAY—40 cks, 20 tons, J W Masters & Co, Georgic, Liverpool
6 cks, 3 tons, F A Reichard, Cymric, Lpool
250 cks, 125 tons, Moore & Munger, Cymric, Liverpool
300 cks, 150 tons, Moore & Munger, Nomadic, Liverpool
200 cks, 100 tons, J W Masters, Nomadic, Liverpool
CHIRETTA—1 bl, Parke, Davis & Co, St Paul, Southampton
3 bls, Schoellkopf, H & M, Manitou, London
CINCHONA BARK—18 bls, 2,147 lbs, Stallman & Fulton, Patricia, Hamburg
404 bls, McKesson & Robbins, Werkendam, Rotterdam
CIVIT—1 cs, 342 ozs, Dodge & Olcott, Patricia, Hamburg
COAL TAR PREP—20 cks, V Koechl & Co, Maasdam, Rotterdam
6 cs, Berlin Aniline Works, Patricia, Hbg
COLCOTHAR—4 bbls, Hemingway & Co, Menominee, London
COLOCYNTH—5 cs, McKesson & Robbins, Peconic, Trieste
COLORS—2 cks, N Y & B Dyewood Co, Georgic, L'pool
1 cs, Fries Bros, La Gascogne, Havre
4 cs, 4 cks, C Helmuth, Maasdam, R'dam
15 pkgs, Rooney & Spence, Manitou, London
12 cks, Toch Bros, Fr der Grosse, Bremen
1 cs, A V Benoit, Fr der Grosse, Bremen
10 cs, Pickhardt & K, Kensington, Ant
65 cks, Pickhardt & K, Patricia, H'b'g
5 cks, Toch Bros, Patricia, H'b'g
CORKS—45 bls, W G Mohring, Panama, Bordeaux
CREOSOTE—200 bbls, 8,000 gals, Schoellkopf, H & M, Manitou, London
CUMMIN SEED—59 bls, Stallman & Fulton, Patria, H'b'g
CUTTLEFISH BONE—100 stps, Stallman & Fulton, Pocahontas, Bari
25 stps, Tyler & Finch Co, Pocahontas, Bari
20 pkgs, Schieffelin & Co, Peconic, Trieste
10 pkgs, J L Hopkins & Co, Pocahontas, Trieste
DEXTRINE—200 bgs, 43,320 lbs, Rose & Co, Canadia, Stettin
50 bgs, Arnold, Hoffman & Co, Polarstjernen, Stettin
DIVI DIVI—37 bgs, 3,900 lbs, Foulke & Co, Prins Wm V, Curacoa
45 bgs, De Sola Lobo & Co, Caracas, Curacoa
26 bgs, 2,860 lbs, De Sola Lobo & Co, Prins Wm V, Curacoa
DRUGS—1 cs, McKesson & Robbins, Manitou, London
5 cs, 7 bls, Schieffelin & Co, Patricia, H'b'g
3 cs, N G Kant, Patricia, H'b'g

A. Klipstein & Company

122 Pearl Street, NEW YORK

CHEMICALS AND DYESTUFFS

AGENTS FOR

ANILINE COLORS

Made by the Society of Chemical Industry BASLE

CHLORATE OF POTASH

BRANCH HOUSES:

BOSTON, 282-295 Congress St. PHILADELPHIA, 50-52 N. Front St. CHICAGO, 186 Kinzie St.
PROVIDENCE, R. I., 13 Mathewson St. CINCINNATI, 315 Walnut St.
HAMILTON, ONT., Catharine St. MONTREAL 917 Lemoine St.

DUTCH METAL—6 cs, Fuchs & Lang Mfg Co, Fr der Grosse, Bremen
DYEWOOD EXT—5 cks, A Klipstein & Co, Georgic, L'pool
ERGOT—10 bls, Parke, Davis & Co, Cymric, L'pool
10 bls, Peek & Velsor, Cymric, L'pool
FORMALDEHYDE—84 dems, Roessler & H Chem Co, Br King, Ant
FULLER'S EARTH—600 bgs, Hammill & Gillespie, Manitou, London
300 bgs, A de Ronde & Co, St Paul, S'h'ton
300 bgs, A de Ronde & Co, St Louis, S'h'ton
FUSTIC—52 pcs, C F Ferrier & Bro, Santiago, St Jago
GINGER—547 bgs, 46,589 lbs, L German & Co, Georgic, L'pool
34 bbls, Mack & Dunham, Alleghany, Kingston
567 bbls, L German & Co, Manitou, London
GLASS, CYL—9 cs, Semon, Bach & Co, Maasdam, R'dam
9 cs, Van Horne, G & Co, Maasdam, R'dam
27 cs, F Ridgeway, Georgic, L'pool
4 cs, L Popper & Son, Fr der Grosse, Bremen
MIRROR—1 cs, P Weiderer, Fr der Grosse, Bremen
PLATE—6 cs, Holbrook Bros, Britannic, L'pool
WINDOW—53 cs, T W Morris, Georgic, L'pool
195 cs, Dougherty & M, Kensington, Ant
530 cs, Heroy & M, Kensington, Ant
1,760 cs, Pittsburgh P G Co, Kensington, Ant
7 cs, Holbrook Bros, Britannic, L'pool
158 cs, Van Horne, G & Co, Britannic, L'pool
55 cs, Thurston & Braidich, Cymric, L'pool
HEMP SEED—200 bgs, Levy & Levis Co, Manitou, London
141 bgs, J Klein, Buffalo, Hull
HENBANE LEAVES—9 bls, J L Hopkins & Co, Majestic, Liverpool
INDIAN RED—25 pkgs, F L Lavanberg, Buffalo, Hull
25 pkgs, G A & E Myer, Buffalo, Hull
INDIGO, EXT—10 cks, 12,828 lbs, J Campbell & Co, Lucania, Liverpool
5 cks, Pickhardt & K, Kensington, Ant
INSECT POWDER—15 kgs, J L Hopkins & Co, Pocahontas, Trieste
IODINE—55 bbls, Watjen, Toel & Co, Georgic, Liverpool
57 bbls, 3,225 lbs, Watjen, Toel & Co, Allianca, Colon
5 bbls, Watjen, Toel & Co, Advance, Colon
IPECAC—2 bls, Parke, Davis & Co, St Paul, Southampton
IRON SULPHURET—1,020 tons, Pim, Forwood & K, Avalon, Pilleys Island
OXIDE—39 bbls, Hemingway & Co, Menominee, London
JALAP—13 bls, 2,290 lbs, Thebaud Bros, Vigilancia, Vera Cruz
JUNIPER BERRIES—100 bgs, Parke, Davis & Co, Hesperia, Leghorn
KAOLIN—500 bgs, G W Sheldon & Co, G Schenker, Messina
LAMPBLACK—13 cks, Knauth, N & K, Maasdam, Rotterdam
28 cks, Jaenecke Bros & F S, F der Grosse, Bremen
LAUREL LEAVES—15 bls, 1,545 lbs, Parke, Davis & Co, Hesperia, Leghorn
LEECHES—4 cs, G H Wittte, F Bismarck, Hamburg
MUSK—1 cs, Lehn & Fink, City of Rio de Janiero, overland from San Francisco
MUSTARD SEED—25 bbls, Schieffelin & Co, Peconic, Trieste
50 bgs, J B Gruman, Manitou, London
MYROBOLANS—800 bgs, N Y & B Dyewood Co, Georgic, Liverpool
NAPHTHALINE—13 cks, V Koechl & Co, Maasdam, R'dam
126 cks, McKesson & Robbins, Manitou, London
6 cks, Roessler & H Chem Co, Werkendam, R'dam
NAPHTOL—25 cks, V Koechl Co, Maasdam, R'dam
10 cks, Pickhardt & K, Kensington, Ant
NUTMEGS—42 bgs, 6,174 lbs, D R James & Bro, Werkendam, R'dam
OCHER—150 cks, 113,704 lbs, S Klein & Co, Britannia, Marseilles
125 cks, 96,380 lbs, J L Smith & Co, Britannia, Marseilles
154 cks, 78,553 lbs, J W Coulston & Co, Britannia, Marseilles
OIL, ALMOND—5 cs, G Lueders & Co, La Gascogne, Havre
BERGAMOT—4 cs, A Hollander & Co, Pawnee, Messina
20 cs, H B Sheldon, Peconic, Messina
50 cs, 1,250 lbs, Dodge & Olcott, Peconic, Messina
50 cs, 1,250 lbs, R F Downing & Co, Peconic, Messina
COD LIVER—25 bbls, 750 gals, Parke, Davis & Co, Idaho, Hull
CROTON—1 cs, Merck & Co, Patricia, H'b'g
DEAD—1,000 dms, 5,000 gals, Josiah Smith, Idaho, Hull
ESS'L—56 cs, G Lueders & Co, La Gascogne, Havre
1 cs, Dodge & Olcott, Manitou, London
4 cs, Leeburger Bros, Patricia, H'b'g
8 cs, Fritzsche Bros, Fr der Grosse, Bremen
1 cs, Lehn & Fink, Patricia, H'b'g
EUCALYPTUS—2 cs, 215 lbs, McKesson & Robbins, Manitou, London
FUSEL—34 pkgs, C Cooper & Co, Pocahontas, Fiume
87 pkgs, Schoellkopf, H & M, Pocahontas, Fiume
GERANIUM—1 cs, C Rockhill, Sempione, Messina
HAARLEM—50 cs, Stallman & Fulton, Werkendam, R'dam
JUNIPER—9 cs, 961 lbs, Knauth, N & K, Patricia, H'b'g
LAVENDER—20 cs, G Lueders & Co, La Gascogne, Havre
8 cs, C Rockhill, Sempione, Messina
8 cs, Magnus & Lauer, Aller, Bremen
4 cs, J B Horner, Britannia, Marseilles
LEMON—200 cs, Dodge & Olcott, Pocahontas, Messina
20 cs, Dodge & Olcott, Manitou, London
PAINT, MARINE—100 bbls, Rahtjens Am Com Co, Manitou, London
PALM STEARINE—23 bbls, W A L Vogt, Kensington, Antwerp
PARSLEY LEAVES—1 bl, Lehn & Fink, Patricia, Hamburg
PATENT DRYER—10 cks, 6,241 lbs, E Hills, Son & Co, Idaho, Hull
27 cks, J Lee Smith & Co, Buffalo, Hull
PEPPER—469 bgs, D P Cruikshank, Manitou, London
SHELLS—149 bgs, F H Leggett & Co, Manitou, London
PERSIAN BERRY EXT—10 bbls, J J Keller & Co, Kensington, Antwerp
PHOSPHORUS—15 cs, 1,650 lbs, J L & D S Riker, Buffalo, Hull
PIMENTO—30 bgs, Macy & Dunham, Alleghany, Kingston
192 bgs, C Wessels & Bro, Alleghany, Kingston
PLUMBAGO—96 bgs, H J Baker & Bro, Manitou, London
POMADE—21 cs, 4,824 lbs, G Lueders & Co, La Gascogne, Havre
POPPY SEED—200 bgs, Levy & Levis Co, Manitou, London
POTASH, BICARB—40 cs, Schoellkopf, H & M, Lucania, Liverpool
CARB—45 cks, A Klipstein & Co, Kensington, Antwerp
34 cks, A Klipstein & Co, Patricia, Hbg
31 cs, Jas Lee & Co, Patricia, Hamburg
37 cks, Arnold, Hoffman & Co, Phoenicia, Hamburg
30 cks, J L & D S Riker,, Cymric, Liverpool
CHLO—100 kgs, Rendrock Powder Co, Island, Copenhagen
200 kgs, J L & D S Riker, Wells City, Bristol
MURI—992 bgs, Battelle & Renwick, Patria, Hamburg
999 bgs, Battelle & Renwick, Patricia, Hbg
PERMANGANATE—10 cks, Roessler & H Chem Co, Patricia, Hamburg
SULPH—250 bgs, P Weidinger & Son, Patria, Hamburg
POTATO STARCH—100 bgs, 21,792 lbs, C Morningstar & Co, Canadia, Stettin
50 bgs, Arnold, Hoffman & Co, Polarstjermen, Stettin
PUMICE—150 pkgs, R J Waddell & Co, St George, Messina
150 bgs, Perry, Ryer & Co, Gottfried Schenker, Messina
QUININE—43 cs, 42,300 ozs, E Levi, Maasdam, Rotterdam
2 cs, Merck & Co, Maasdam, Rotterdam
72 cs, 36,000 ozs, G W Sheldon & Co, Fr der Grosse, Bremen
36 cs, 18,000 ozs, Schoellkopf, H & M, Patricia, Hamburg
RED EARTH—184 bgs, 40,320 lbs, Gabriel & Scholl, Aurania, Liverpool

Cream of Tartar **Tartaric Acid**

GUARANTEED 99—100 Per Cent. Pure.

TARTAR CHEMICAL COMPANY, 47 Cedar St. N. Y

660 cs, J Fitzpatrick & Co, Br King, Ant
GLUE—27 cs, A K Gardiner & Bro, Maasdam, R'dam
15 cks, S Isaacs & Co, St Louis, S'h'ton
GLYCERINE—40 dms, 43,600 lbs, Alpers & Mott, Hesperia, Leghorn
71 dms, 80,588 lbs, Marx & Rawolle, American, London
60 dms, 64,681 lbs, M Leibman & Co, Britannic, Marseilles
40 dms, 43,370 lbs, M Leibman & Co, G Schenker, Venice
REFINED—10 cs, 980 lbs, McKesson & Robbins, Manitou, London
4 cs, Lehn & Fink, St Louis, S'h'ton
GUAZA—4 bls, Lehn & Fink, St Louis, S'h'ton
GUM—1 cs, 112 lbs, Parke, Davis & Co, St Paul, S'h'ton
27 bls, Stallman & Fulton, St Paul, S'h'ton
24 cs, Parke, Davis & Co, Manitou, London
1 cs, Schieffelin & Co, Patricia, H'b'g
16 cs, McKesson & Robbins, Peconic, Trieste
ARABIC—5 bls, Parke, Davis & Co, Pocahontas, Trieste
43 cs, D E Green & Co, St Louis, S'h'ton
50 bgs, Arnold, Hoffman & Co, St Paul, S'h'ton
ASAFOETIDA—9 cs, Parke, Davis & Co, Manitou, London
18 cs, Parke, Davis & Co, Menominee, London
ALOES—180 cs, Foulke & Co, Prins Wm V, Curacoa
59 cs, De Sola Lobo & Co, Caracas, Curacoa
100 cs, H W Peabody & Co, Caracas, Curacoa
BENJAMIN—36 cs, Parke, Davis & Co, Werkendam, R'dam
CHICLE—25 bls, 2,224 lbs, Busk & Jevons, Ardandhu, Belize
12 bls, 1,095 lbs, A S Lascelles & Co, Ardandhu, Belize
DAMAR—15 cs, R F Beck, Patricia, H'b'g
MASTIC—3 cs, Tyler & Finch Co, Pocahontas, Trieste
5 cs, McKesson & Robbins, Peconic, Trieste
MYRRH—10 bls, McKesson & Robbins, Peconic, Trieste
SUB—10 cks, Baldwin Bros & Co, City of Rome, Glasgow
TRAG—149 cs, Thurston & Braidich, St Louis, Southampton
6 cs, M Myers & Co, Patricia, Hamburg
LICORICE, ROOT—5,549 bls, 2,004,800 lbs, MacAndrews Forbes, Francesca, Alexandria
25 bgs, Parke, Davis & Co, Pocahontas, Trieste
810 bls, MacAdams & Forbes, American, London
5 bls, Lehn & Fink, Cymric, Liverpool
LIME, CITRATE—24 cks, C Pfizer & Co, St George, Messina
10 cks, C Pfizer & Co, Pocahontas, Messina
JUICE—2 hhds, J W Roche, Pretoria, Domenica
LITHOPONE—66 cks, Gabriel & Schall, Fr der Grosse, Bremen
LOGWOOD—600,000 lbs, H Kainer & Co, Erna, Pt de Paix
LONDON PURPLE—108 pkgs, Hemingway & Co, Menominee, London
LOVAGE ROOT—5 bbls, Lehn & Fink, Patricia, Hamburg
MAGNESITE, CALC—5,051 bgs, Knauth, N & K, Pocahontas, Fiume
MAGNESIUM, CHLO—2 cks, Roessler & H Chem Co, Patricia, Hamburg
MANGANESE, OXIDE—24 cks, Jas Lee & Co, State of Nebraska, Glasgow
MEDICAL BARK—3 bls, 1,130 lbs, McKesson & Robbins, Peconic, Trieste
26 bls, Cohen & Co, Santiago, Nassau
FLOWERS—15 bls, McKesson & Robbins, Peconic, Trieste
8 bls, R Hillier's Son Co, Patricia, H'b'g
LEAVES—10 bls, J D Nordlinger, Pocahontas, Trieste
4 bls, 2 cs, J L Hopkins & Co, Majestic, Liverpool
3 cs, B Levi, Fr der Grosse, Bremen
1 bl, Lehn & Fink, Patricia, Hamburg
5 bbls, J L Hopkins & Co, Pocahontas, Trieste
PREP—2 cs, Schieffelin & Co, St Paul, Southampton
2 cs, Schall & Co, Manitou, London
ROOTS—2 bls, Schoellkopf, H & M, Patricia, Hamburg
32 bls, Parke, Davis & Co, Patricia, H'b'g
2 bls, McKesson & Robbins, Peconic, Trieste
11 bls, R Hillier's Son Co, Peconic, Trieste
11 bls, Peck & Velsor, Peconic, Trieste
MICA—5 cs, C D Orth, St Paul, Southampton
50 cs, Crandal & Godley Co, Peconic, Messina
NUT—94 cks, C Schubarth, American, London
OLIVE FOOT—90 bbls, R F Downing & Co, Hesperia, Leghorn
130 bbls, W R Peters & Co, Hesperia, Leghorn
150 bbls, Oil Seeds Pressing Co, Pocahontas, Leghorn
25 bbls, Oil Seeds Pressing Co, Sempione, Leghorn
150 bbls, Nittner & Slavitz, Pocahontas, Leghorn
150 bbls, Nittner & Slavitz, Peconic, Bari
35 bbls, Holbrook Mfg Co, Britannia, Marseilles
40 bbls, Jacob & Allison, Britannia, Marseilles
25 bbls, Arnold, Hoffman & Co, Patria, Marseilles
ORANGE—10 cs, 250 lbs, Crandal & Godley Co, Peconic, Messina
60 cs, 1,500 lbs, Dodge & Olcott, Peconic, Messina
PALM—14 cks, United Oil Co, Aurania, Liverpool
21 cks, T M Marc & Co, Patricia, H'b'g
RAPE—20 bbls, Bliven & Carrington, Manitou, London
15 bbls, Leber & Meyer, Canadia, Stettin
THYME—3 cs, C Rockhill, Sempione, Messina
4 cs, J B Homer, Britannia, Marseilles
OPIUM—6 cs, 672 lbs, McKesson & Robbins, Manitou, London
2 cs, 1,320 lbs, Merck & Co, Kaiser Wm der Grosse, Bremen
ORANGE MINERAL—37 cks, Pickhardt & K, Kensington, Antwerp
WATER—15 pkgs, A A Stillwell, Aller, Genoa
RED LEAD—28 cks, 22,348 lbs, A B Ansbacher & Co, Kensington, Antwerp
28 cks, 21,951 lbs, I Pfeiffer, Kensington, Antwerp
19 cks, 11,468 lbs, M Herrmann & Co, Maasdam, Rotterdam
33 cks, Pickhardt & K, Kensington, Ant
ROSE WATER—20 cbys, Leeburger Bros, Aller, Genoa
30 cbys, Magnus & L, Aller, Genoa
30 cbys, J B Horner, Britannia, Marseilles
SAGE—60 bls, F H Leggett & Co, Pocahontas, Trieste
SALT CAKE—12 cks, A de Ronde & Co, Britannic, L'pool
SANDALWOOD—20 bgs, Dodge & Olcott, Manitou, London
196 logs, Dodge & Olcott, Manitou, London
SARSAPARILLA—11 bls, Kunhardt & Co, Irrawaddy, C Bolivar
39 bls, Flint, Eddy & Co, Lydia, Tampico
1 bl, Eggers & Heinlein, Ardandhu, Belize
4 bls, I Brandon & Bro, Advance, Colon
SATIN WHITE—5 cks, 954 lbs, Pickhardt & K, Patria, H'b'g
SENNA—35 bls, 12,930 lbs, Parke, Davis & Co, St Paul, S'h'ton
6 bls, Stallman & Fulton, St Paul, S'h'ton
PODS—6 bls, Parke, Davis & Co, Manitou, London
SIENNA—20 cks, W I Clark, Hesperia, Leghorn
SIMARUBA BARK—8 cs, 1,840 lbs, Flint, Eddy & Co, Irrawaddy, C Bolivar
SOAP, CASTILE—200 cs, J C Butler, Hesperia, Leghorn
SODA ASH—81 cks, 135,400 lbs, J L & D S Riker, Georgic, Liverpool
29 cks, 45,240 lbs, Churchman & Co, Georgic, L'pool

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NO Rust Spots on Tin. NO Peeling Off. NO Discoloring of Labels.

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CORRESPONDENCE SOLICITED.

25 cks, 44,866 lbs, Wing & Evans, Cymric, L'pool
CHLO—450 cks, A Klipstein & Co, Britannic, Marseilles
150 cks, 16,800 lbs, Chemical Imp & Mfg Co, Britannic, Marseilles
CRYSTAL CARB—56 cks, 22,400 lbs, J L & D S Riker, Georgic, L'pool
56 cks, 22,400 lbs, J L & D S Riker, Cymric, L'pool
NITRATE—18,078 bgs, Beeche & Co, Armasona, Caleta Buena
SAL—140 cks, 56,000 lbs, Wing & Evans, Cymric, L'pool
SPONGE—46 cs, Lebess Sponge Co, Semplone, Palermo
12 bgs, J Papadapolo, Ardandhu, Belize
19 cs, Huenke Bros, Manitou, London
257 cs, Schieffelin & Co, manitou, London
ST JOHN'S BREAD—100 bls, Parke, Davis & Co, Pocahontas, Trieste
SULPHUR ORE—8,453,625 lbs, Penna Salt Mfg Co, Roda, Huelva
SUMAC, EXT—30 cks, 27,881 lbs, G W Sheldon, Lucania, L'pool
TALC—913 bgs, 100,000 lbs, Hammill & Gillespie, Panama, Bordeaux
TAMARINDS—25 pkgs, G G Cowl, Fontabelle, Domenica
25 pkgs, A U Andrus & Co, Fontabelle, Domenica
13 bbls, J W Roche, Pretoria, Domenica
TAPIOCA—26 bgs, F H Leggett & Co, Manitou, London
TIN OXIDE—20 cks, L Windmuller & Roelker, Idaho, Hull
7 cks, J Marsching & Co, Patricia, H'b'g
CRYSTALS—9 cks, A Klipstein & Co, Georgic, L'pool
TONCA BEANS—10 cs, Lawrence, Johnson & Co, Paraense, Para
TURPENTINE, VENICE—15 cs, 3 bbls, McKesson & Robbins, Peconic, Trieste
URANIUM OXIDE—1 cs, Schoellkopf, H & M, Patricia, H'b'g
VANILA BEANS—4 cs, P Harmony's Neph & Co, Lydia, Tampico
7 cs, 1,212 lbs, Flint, Eddy & Co, Vigilancia, Vera Cruz
VARNISH—6 cks, Semon, Bach & Co, Maasdam, R'dam
VERDIGRIS—10 cks, P H Petry & Co, La Champagne, Havre
VERMILION—3 bbls, Toch Bros, G Schenker, Trieste
WASH BLUE—20 cs, 2,006 lbs, O Pressprich & Son, Kensington, Ant
WAX, CARNAUBA—13 bgs, J H Rossbach & Bro, Olbers, Rio
CERESIN—300 bls, C Morningstar & Co, Pocahontas, Fiume
WHITE LEAD—197 pkgs, 31,925 lbs, J L Smith & Co, Manitou, London
YOLK ASH—100 cks, A Klipstein & Co, Patricia, H'b'g
ZINC CHLO—31 cks, 21,912 lbs, Roessler & H Chem Co, Patricia, H'b'g
OXIDE—100 bbls, G A & E Meyer, Kensington, Ant
9 cs, Lehn & Fink, Manitou, London

WAREHOUSED.

ANILINE COLORS—173 cks, 9 cs, W J Matheson & Co, Maasdam, Rotterdam
2 cks, A P Mendy & Co, F Bismarck, Ham'g
1 ck, C Bischoff & Co, Fk der Grosse, Brmn
BAY RUM—15 bbls, 456 gals, Paris, Allen & Co, Fontabelle, St Croix
BRONZE POWDER—3 cs, O Schlegel, Fk der Grosse, Bremen
CHEMICAL COMP—9 cs, E Levi, Maasdam, Rotterdam
9 cs, Roessler & H Chem Co, F Bismarck, Hamburg
CORKS—164 bls, W J Farrell, St Paul, S'th'ton
DUTCH METAL LEAF—1 cs, O Schlegel, Fk der Grosse, Bremen
GALL EXT—10 bbls, J J Keller & Co, Kensington, Antwerp
GUM CHICLE—154 bls, 9,987 lbs, O G Mayer & Co, Ardandhu, Belize
99 bls, 17,640 lbs, E N Tibbals, M L Villaverde, Vera Cruz
86 bls, 14,879 lbs, E N Tibbals, Lydia, Tampico
61 bls, 9,716 lbs, Flint, Eddy & Co, Vigilancia, Campeche
31 bls, 6,116 lbs, E Steiger & Co, Vigilancia, Campeche
MICA—28 cs, C D Orth, St Paul, Southampton
OIL, COD—80 cks, Harvey & Outerbridge, Silvia, St John's
CODLIVER—75 bbls, Parke, Davis & Co, Idaho, Hull
50 bbls, Schieffelin & Co, Idaho, Hull
TAR—44 cks, R F Downing & Co, Kensington, Antwerp
TAPIOCA FLOUR—229 bgs, J W Rulon & Son, Isaac Reed, Singapore

Withdrawals from Bond.

Week Ending July 7.

Aniline Colors, cks	61
Aniline Colors, cs	1
Aniline Colors, kgs	5
Albumen, cks	10
Bay Rum, cks	2
Bronze Powder, cs	6
Camphor, cs	100
Canary Seed, bgs	450
Chemical Comp, cs	7
Chemical Salt, cs	25
China Clay, cks	350
Cocoa Butter, bls	25
Coal Tar Prep, cks	4
Corks, bls	40
Dextrine, bgs	100
Glass, Plate, cs	24
Gum Chicle, bls	6
Gum Chicle, bgs	70
Logwood Ext, cks	20
Mica, cs	14
Ochre, cks	2
Oil, Codliver, cks	50
Oil, Cottonseed, cs	3
Opium, cs	6
Paint, cks	9
Paint, dms	7
Potash, Chlo, kgs	70
Potato Flour, bgs	200
Sage, bls	25
Sponge, bls	1
Sumac, bgs	300
Tapioca Flour, bgs	226
Vanillin, cs	1

Boston Imports.

ALIZARINE—18 cks, Beach & Co, Columbian, London
62 cks, Farbenfabriken, Elberfeld Co, English King, Antwerp
4 cks, Beach & Co, Oakmore, London
AMMONIA, SULPHATE—250 bags, Sachem, Liverpool
ANILINE COLORS—3 cs and 29 bbls, English King, Antwerp
5 kegs, J A & W Bird Co, Armenian, L'pool
OIL—9 drs, English King, Antwerp
SALTS—8 cks, C Bischoff, English King, Antwerp
221 bbls, English King, Antwerp
4 cs, J A & W Bird Co, Armenian, L'pool
BLEACH—39 bbls, English King, Antwerp
177 cks, Sachem, Liverpool
171 cks, J L & D S Riker, Sachem, L'pool
BRIMSTONE—667 bags, Armenian, Liverpool
BRISTLES—9 cs, Oakmore, London
CHINA CLAY—100 cks, Moore & M, Pavonia, Liverpool
640 cs, Pavonia, Liverpool
150 cks, Morey & Co, Armenian, Liverpool
100 cks, C S Bush, Sachem, Liverpool
COLORS—28 cks, Healey Seaver, Armenian, Liverpool
5 kegs, Armenian, Liverpool
DYEWOOD EXT—30 pkgs, W N Proctor, Pavonia, Liverpool
GLASS, WINDOW—1,752 cs, J B Moors, English King, Antwerp
14,439 cs, English King, Antwerp
GLAUBER SALTS—10 bbls, English King, Antwerp
GLUE—26 cs, Oakmore, London
GREASE—30 bdls, Columbian, London
10 bbls, C. W. Geller, English King, Ant
147 cks, G H Leonard, Oakmore, London
4 cks, W W Proctor, Armenian, Lpool
INDIGO—4 cs, A Lee, English King, Antwerp
125 cs, Rolli Bros, Vortigern, Calcutta
OIL—20 bbls, Oakmore, London
CREOSOTE—50 bbls, Ontario, Hull
PALM—452 cks, 58 bbls, Pettingill & E, Tyree, Addah
RECOVERED—50 bbls, Sachem, Lpool
SOD—45 bbls, English King, Antwerp
PAINT—3 cks, Dexter Bros, Ontario, Hull
PHOSPHATE—200 tons, Bradley Fertz Co, Xenia, Antwerp
2,000 bgs, Xenia, Antwerp
POTASH—10 bbls, English King, Antwerp
BICH—30 cks, J L & D S Riker, Hibernian, Glasgow
CHLORATE—300 kgs, B D Webber, Armenian, Liverpool
RED LEAD—16 cks, Chadwick Lead Wks, Pavonia, Liverpool
SOAP—25 cks, Armenian, Liverpool
SODA—15 cks, New England, Liverpool
ASH—280 bgs, 24 cks, Morey & Co, Armenian, Liverpool
89 tcs, 158,520 lbs, Wing & Evans, Armenian, Liverpool
36 cks, Sachem, Liverpool
CAUSTIC—50 drs, Inter S S Co, New England, Liverpool
CHLORATE—100 kgs, J D Lewis, Armenian, Liverpool
PRUSS—21 cks, J D Lewis, Armenian, Liverpool
SAL—280 bbls, Sachem, Liverpool
SUMAC—350 bgs, Columbian, London
100 bgs, Oakmore, London
TAR, COAL—7 bbls, English King, Antwerp
VARNSH—3 cs, Oakmore, London

Philadelphia Imports.

ACID, CARBOLIC—48 cks, Maine, London
OXALIC—16 cks, W H & F Jordan, Jr, Switzerland, Antwerp
25 cks, Waesland, Liverpool
ANILINE COLORS—9 bbls, Andrekovicz & Dunk, Switzerland, Antwerp
SALTS—32 cks, Geisenheimer & Co, Switzerland, Antwerp
24 cks, O S Janney & Co, Nordkyn, R'dam
BARIUM CHLORIDE—22 kegs, Pickhardt & Kuttroff, Switzerland, Antwerp
BARK, CINCHONA—420 bls, Nordkyn, R'dam
BISMUTH—9 cs, Maine, London
BLEACH—83 cks, Carthaginian, Glasgow
58 cks, J W Hampton, Jr, & Co, Waesland, Liverpool
84 cks, Waesland, Liverpool
CAMPHOR—122 tubs, 4th St Nat Bank, Maine, London
CHALK—370 tons & 10 cks, Maine, London
CHINA CLAY—220 cks, J B Moors & Co, Carthaginian, Glasgow
400 cks, Dunn Bros, Waesland, Liverpool
400 cks, O S Janney & Co, Waesland, Liverpool
200 cks, J W Hampton, Jr, & Co, Waesland, Liverpool
CLAY—27 cks, Chas Lennig & Co, Nordkyn, Rotterdam
25 cks, Brown Bros & Co, Switzerland, Ant
COLORS, DRY—1 ck, Hanna-Schoellkopf Co, Waesland, Liverpool
CREOSOL—75 cks, Maine, London
CREOSOTE SALTS—1,040 bgs, Maine, London
DYESTUFF—17 bbls, Switzerland, Ant
KAINIT—100 tons, Autillian, Hamburg
100 tons, H H Salmon & Co, Autillian, Hbg
LITHARGE—20 cks, Brown Bros & Co, Waesland, Liverpool
LOGWOOD—1 lot, Sharpless D E Co, from Cape Haytien
1 lot, Sharpless D E Co, from St. Marc
NATRON—100 cks, Chas Lennig & Co, Autillian, Hamburg
NUX VOMICA—553 bgs, Maine, London
OIL, COCOANUT—5 cks, 4th St Nat Bank, Maine, London
SULPHUR—50 bbls, Waesland, Liverpool
PEPPER—795 bgs, Maine, London
POTASH—10 cks, Switzerland, Antwerp
50 dms, Edw Hill's Son & Co, Switzerland, Antwerp
BICARB—2 cs, Maine, London
BICHROMATE—30 cks, J L & D S Riker, Carthaginian, Glasgow
MURIATE—1,000 bgs, Autillian, Hamburg
SOAP STOCK—75 bbls, Waesland, Liverpool
30 cks, Brown Bros & Co, Waesland, Lpool
SODA ASH—10 cks, Brown Bros & Co, Waesland, Liverpool
CAUSTIC—50 dms, Edw Hill's Son & Co, Waesland, Liverpool
PHOSPHATE—7 cks, Switzerland, Antwerp
PRUSS—16 cks, Lazard Freres, Maine, Lon
26 cks, Carthaginian, Glasgow
SAL—140 cks, 56,000 lbs, Wing & Evans, Waesland, Liverpool
SPAR—50 bgs, Potts Chem Co, Waesland, Liverpool
TAR, COAL—100 bbls, Waesland, Lpool
VERDIGRIS—5 cks, W H & F Jordan, Jr, Switzerland, Antwerp
YOLK ASH—119 cks, Brown Bros & Co, Autillian, Hamburg
ZINC, OXIDE—80 bbls, 60 cs, J Lucas & Co, Switzerland, Antwerp

Baltimore Imports.

BLEACH—55 cks, Venango, Rotterdam
CHEMICALS—714 pkgs, Indore, Liverpool
CLAY—537 cs, Willehead, Bremen
GLASS, WINDOW—1,230 cs, Indore, Liverpool
KAINIT—450 tons, Willehead, Bremen
MANURE SALT—1,000 bgs, Willehead, Bremen
PAINT—98 cs, Indore, Liverpool
POTASH—1,500 bgs, Willehead, Bremen
SODA ASH—19 cks, 120 bgs, 67,970 lbs, Wing & Evans, Vedamore, Liverpool

Newport News Imports.

BLEACH—80 cks, Read, Holliday & Son, Shenandoah, Liverpool
343 pkgs, J L & D S Riker, Shenandoah, Liverpool
36 cks, Isaac Winkler & Bro, St Leonards, Antwerp
59 cks, A Klipstein & Co, St Leonards, Ant
GLASS, WINDOW—147 cs, G Cramer, Shenandoah, Liverpool
820 cs, Semon, Bache & Co, St Leonards, Antwerp
LOCUST BEANS—444 bgs, Murray & Nickel Mfg Co, Shenandoah, Liverpool
OIL, COCOANUT—94 cks, Isaac Winkler & Bro, St Leonards, Antwerp
SODA, CAUSTIC—50 dms, E Hill's Son & Co, Shenandoah, Liverpool

New Orleans Imports.

OIL—15 cs, Bernard Hall, Liverpool
13 cs, Persian Prince, Marseilles
CREOSOTE—990 cks, Bernard Hall, Lpool
SARSAPARILLA—22 bls, Allianca, Bluefields
SOAP—200 bxs, Bernard Hall, Liverpool
SODA ASH—26 tcs, 45,555 lbs, Wing & Evans, Bernard Hall, Liverpool
CAUSTIC—80 dms, Bernard Hall, Liverpool
WHITE LEAD—70 kgs, Bernard Hall, Lpool

San Francisco Imports.

BARYTES—37 bbls, Almora, H'b'g
BLEACH—200 drs, Almora, H'b'g
CHEMICALS—80 pkgs, Almora, H'b'g
COPRA—722 bgs, Williams, Diamond & Co, Maroposa, Sydney
FERTILIZER—4,500 bgs, Almora, H'b'g
100 bgs, Avon, London
GUM KAURI—47 bgs, 5 cs, Anglo Cal Bank, Maroposa, Sydney
21 bgs, Maroposa, Sydney
NAPHTHALINE—80 cks, Almora, H'b'g
OIL FISH—5 cs, Curacao, Guaymas
OLEINE—100 bbls, Br N Am Bank, Maroposa, Sydney
SOAP—700 cs, Almora, H'b'g
TALC—50 bgs, Almora, H'b'g

Montreal Imports.

ACID, OXALIC—11 bbls, 9 cs, Assyrian, Ant
ALIZARINE—10 cks, Assyrian, Antwerp
ALUM—40 cks, Pomeranean, Glasgow
BARYTA—100 bgs, Assyrian, Antwerp
BLEACH—27 cks, Laurentian, Liverpool
135 bgs, Pinemore, Liverpool
BORAX—99 cks, Dominion, Liverpool
CHALK—8 cs, Pinemore, Liverpool
CHEMICALS—54 pkgs, 14 cs, Assyrian, Ant
5 cks, Monterey, Bristol
CHINA CLAY—385 cks, Monterey, Bristol
COLORS—66 pkgs, 3 cs, Assyrian, Antwerp
COPPER SULPHATE—5 cks, Ikbal, Liverpool
CREAM TARTAR—2 cks, Brazilian, London
2 cks, Laurentian, Liverpool
DEXTRINE—44 bgs, Akaba, Hamburg
GLASS—200 pkgs, Laurentian, Liverpool
136 pkgs, Roman, Liverpool
67 cs, Dominion, Liverpool
PLATE—5 cs, Akaba, Hamburg
357 cs, Assyrian, Antwerp
WINDOW—699 cs, Assyrian, Antwerp
LOGWOOD EXTRACT—15 cks, Laurentian, Liverpool
MAGNESIA—31 cs, Laurentian, Liverpool
2 cs, Pomeranean, Glasgow
MORPHINE—2 cs, Brazilian, London
OIL, LINSEED—50 bbls, Lake Ontario, Lpool
50 bbls, Monterey, Bristol
PAINT—1 ck, Brazilian, London
SOAP—407 bxs, 100 cs, Laurentian, Lpool
1,000 cs, Dominion, Liverpool
1 cs, Pomeranean, Glasgow
SODA—13 cks, Laurentian, Liverpool
ASH—50 bgs, Laurentian, Liverpool
125 bgs, 25 pkgs, Dominion, Liverpool
BICH—10 cks, Pomeranean, Glasgow
CAUSTIC—15 cks, 100 drms, Dominion, Lpool
40 drms, Laurentian, Liverpool
HYPO—91 cks, Akaba, Hamburg
SAL—100 pkgs, St Romans, Liverpool

EXPORTS FROM NEW YORK.

Week ending July 7.

ACID, OXALIC—6 bbls, $79, Yucatan, Havana
SULPHURIC—1 drm, $26, Alleghany, Cartagena
1 drm, $24, Alleghany, Port Limon
10 cbys, $38, Ardandhu, Puerto Cortez
AMMONIA—2 cs. $92, Athos, Colon
1 drm, $47, Alleghany, Cartagena
2 drms, $30, Alleghany, Port Limon
BARK—600 bgs, $200, Acanthus, Rotterdam
EXTRACT—54 bbls, $500, Servia, Liverpool
CALCIUM CARBIDE—60 drms, $210, John Sanderson, Yokohama
1 drm, $7, Yucatan, Progreso
240 cans, $924, Heathdene, Calcutta
CANDLES—10 cs, 30 bxs, $79, San Marcos, Porto Rico
20 cs, 60 bxs, $447, Athos, Colon
5 crs, 1 cs, $63, Erna, Hayti
2 cr, $21, Alps, Hayti
1 bx, $2, Alleghany, Kingston
3 bxs, $16, Alleghany, Cartagena
10 cs, $10, Alleghany, Port Limon
5 crs, $54, Prins Willem V, Hayti
50 cs, $49, Prins Willem V, Carupano
40 bxs, $78, Prins Willem V, C Bolivar
100 cs, $255, Ardandhu, Puerto Cortez
10 bxs, 25 cs, $35, Ardandhu, Kingston
2 cr, $24, Jennie A. Stubbs, Cayenne
CASSIA—9 bales, $50, San Marcos, Porto Rico
COPPER SULPHATE—216 bbls, $5,978, Acanthus, Rotterdam
COTTONSEED MEAL—5 bgs, $6. Alleghany, Kingston
DEXTRINE—110 bgs, $693, Hesperia, Genoa
200 bgs, $1,250, Werkendam, Amsterdam
DYEWOOD EXTRACT—75 bbls, 100 bxs, $2,133, Westernland, Antwerp
20 kgs, $347, Kent, Sydney
46 pkgs, $906, Aller, Genoa
255 bxs, $778, Werkendam, Amsterdam
GINGER—10 bbls, $210, Othello, Freemantle
GLUCOSE—100 bbls, $3,450, Cevic, Liverpool
150 bbls, $1,400, Herschel, Manchester
25 bbls, $292, Othello, Freemantle
100 bbls, $985, Holbein, Manchester
5 bbls, $50, Critic, Leith
20 bbls, $244, Newlyn, Montevideo
GLUE—10 cks, 4 kgs, $540, Konigen Luise, Bremen
7 bbls, $190, Yucatan, Havana
5 bbls, $95, Fratelli Beverino, Sydney
10 bbls, $250, Tuscarora, London
1 cs, $4, Alleghany, Kingston
FISH—1 bbl, $35, Patria, Hamburg
GRAPE SUGAR—250 bgs, $375, Critic, Leith
GREASE, SOAP—1,000 tcs, $19,239, Hesperia, Marseilles
25 tcs, $456, Yucatan, Progreso
475 bbls & 44 kgs, $1,658, Cevic, Liverpool
LUB—1 cs, $8, Kentucky, Copenhagen
10 kgs, $22, Yucatan, Havana
78,545 lbs, $3,000, Montcalm, London
4 cs, $6, Alleghany, Port Limon
10 bbls & 20 kgs, $285, Manitou, London
20 bbls, $443, Newlyn, Buenos Ayres
GUM COPAL—31 cs, $1,200, Manitou, London
KALSOMINE—7½ bbls, $32, Alleghany, Kingston
LEAD—4,703 pigs, 448,048 lbs, $13,441, Brasilia, Hamburg
9,343 pigs, 840,391 lbs, $24,445, Holbein, Manchester
2,678 pigs, 224,004 lbs, $6,600, Jersey City, Bristol
1,307 pigs, 112,012 lbs, $3,300, Pocahontas, Liverpool
4,711 pigs, 448,070 lbs, $13,442, Peconic, Trieste
6,990 pigs, 672,046 lbs, $20,161, Patria, Hamburg
LIME ACETATE—1,534 bgs, $2,800, Brasilia, Hamburg
840 bgs, $1,250, Herschel, Manchester
4,000 bgs, $8,400, St Cuthbert, Antwerp
MILK SUGAR—30 bbls, $675, John Sanderson, Yokohama
OIL, CAKE—1,786 bgs, $6,000, Cevic, Liverpool
795 bgs, $3,000, Jersey City, Bristol
3,750 bgs, $10,050, Westernland, Antwerp
1,507 bgs, $5,100, St. Cuthbert, Antwerp
748 bgs, $2,475, Werkendam, Amsterdam
COCOANUT—2 bbls, $75, Jennie A Stubbs, Cayenne
CORN—120 bbls, $1,550, Manhattan, London
240 bbls, $3,100, St Cuthbert, Antwerp

Kryofine Pat. Aminoform Vanillin Crystals Hydragogin
Antipyrine C. P., Powder or Crystals Heliotropin Crystals Campnoroxol
Diathesin Oxalic Acid Bisol Sapodermin Menthoxol
C BISCHOFF & CO. 87—89 PARK PLACE NEW YORK

COTTONSEED—7 bbls, $140, Marquette, London
1,000 bbls, $12,500, Acanthus, Rotterdam
3 bbls, $45, San Marcos, Porto Rico
300 bbls, $3,900, Hesperia, Marseilles
320 bbls, $4,725, Kentucky, Copenhagen
26 bbls & 20 cs, $411, Willowdene, St Lucia
5 cs, $25, Matanzas, Tampico
10 bbls, $133, Willowdene, Martinique
150 bbls, $1,430, Roman Prince, Santos
13 cs, $50, Athos, Colon
50 bbls, $700, Aller, Genoa
200 bbls, $1,513, Holbein, Manchester
120 bbls, $1,800, Idaho, Hull
345 bbls, $5,173, Buffon, Rio Janeiro
125 cs & 3 bbls, $434, Alleghany, Kingston
250 bbls, $4,500, Maasdam, Rotterdam
50 bbls, $836, Newlyn, Buenos Ayres
100 cs & 39 bbls, $884, Newlyn, Montevideo
600 bbls, $9,890, Britannic, Marseilles
50 cs, $149, Ardandhu, Kingston
CYLINDER—25 cs, $58, Willowdene, Barbadoes
ESS'L—1 cs, $28, Kent, Melbourne
9 cs, $312, John Sanderson, Yokohama
50 cs, $1,500, Manitou, London
46 cs, $2,740, Patria, Hamburg
LARD—5 bbls, $100, Willowdene, Demerara
2 cs, $10, Willowdene, St Lucia
100 bbls, $2,145, Roman Prince, Santos
6 bbls, $119, Athos, Colon
25 bbls, $500, Holbein, Manchester
65 bbls, $1,300, La Gascogne, Havre
60 bbls, $1,202, Manitou, London
2 bbls, $29, Newlyn, Buenos Ayres
⅛ bbl, $13, Prins Willem V, Hayti
LINSEED—25 cs, $124, Yucatan, Vera Cruz
14 cs, $80, Athos, Colon
10 cs, 1 bbl, $55, Alps, Hayti
6 cs, $35, Alleghany, Savanilla
5 cs, $22, Prins Willem V, Carupano
1 bbl, $23, Caracas, La Guayra
6 bbls, $130, Jennic A Stubbs, Cayenne
4 cs, $21, Ardandhu, Livingston
2 bbls, $42, Ardandhu, Inagua
LUB—60 bbls, $400, Cevic, Liverpool
60 bbls, $2,451, Trave, Bremen
340 bbls, 80 cs, $2,750, Brasilia, Hamburg
80 bbls, $400, Aller, Genoa
90 bbls, $600, La Gascogne, Havre
36 bbls, $159, Manuel L Villaverde, Havana
2,100 cs, 349 bbls, $5,945, Com T H Allen, Yokohama
35 bbls, $405, Marquette, London
15 bbls, $473, Acanthus, Havre
240 bbls, $2,400, Acanthus, Rotterdam
350 bbls, $1,700, Jersey City, Bristol
150 bbls, $1,003, Manhattan, London
990 bbls, $4,950, Westernland, Antwerp
12 cs, $55, San Marcos, Porto Rico
55 bbls, $650, Hesperia, Marseilles
100 cs, $213, Kent, Sydney
50 bbls, $521, John Sanderson, Shanghai
2 bbls, $36, Konigin Luise, Bremen
100 bbls, $600, Kentucky, St Petersburg
20 bbls, $112, Yucatan, Vera Cruz
60 bbls, $269, Matanzas, Tampico
15 bbls, $90, Willowdene, St Lucia
8 bbls, $52, Athos, Colon
240 bbls, $1,145, Heathdene, Calcutta
3,635 bbls, $17,623, Heathdene, Bombay
1 bbl, $20, Paranese, Maranham
50 bbls, 30 cs, $1,000, Liv, Dunkirk
1,960 bbls, $9,800, Liv, Havre
8 cs, $20, Angara, Pernambuco
2,335 bbls, $11,760, Holbein, Manchester
60 bbls, $542, Lucania, Liverpool
1,181 bbls, $6,463, Idaho, Hull
490 bbls, $3,887, La Gascogne, Havre
680 bbls, $3,671, City of Rome, Glasgow
35 bbls, $206, Buffon, Rio Janeiro
4 bbls, $99, Alps, Hayti
16 bbls, $195, Alleghany, Savanilla
225 bbls, $1,125, Werkendam, Amsterdam
1,132 bbls, $8,291, Maasdam, Rotterdam
1,014 bbls, $6,957, Manitou, London
470 cs, 95 bbls, $2,480, Newlyn, Buenos Ayres
55 cs, $138, Newlyn, Montevideo
1,228 bbls, $9,859, Patria, Hamburg
3 bbls, $15, Prins Willem V, Hayti
MEAL—200 bgs, $320, T Towner, St Croix
2,000 bgs, $1,210, Konigin Luise, Bremen
35 bgs, $56, Willowdene, Demerara
1,000 bgs, $1,600, Willowdene, Barbadoes
4 bgs, $7, Alleghany, Kingston
20 bgs, $36, Willowdene, St Lucia
10 bgs, $16, Prins Willem V, Surinam
20 bgs, $33, Jennie A Stubbs, Cayenne
MIN'L COLZA—260 bbls, $1,300, Cevic, Lpool
119 bbls, $900, Trave, Bremen
300 bbls, $1,500, Jersey City, Bristol
50 bbls, $250, Heathdene, Bombay
200 bbls, $1,250, Idaho, Hull
5 cs, $9, Alps, Hayti
100 bbls, $500, Werkendam, Amsterdam
OLEO—215 tcs, $5,836, Brasilia, Hamburg
250 tcs, $10,200, Westernland, Antwerp
272 tcs, $8,878, Kentucky, Copenhagen
239 tcs, $5,664, Armenia, Copenhagen
185 tcs, $4,482, Idaho, Hull
3,219 tcs, $95,070, Maasdam, Rotterdam
150 bbls, $4,800, St Cuthbert, Antwerp
1,868 tcs, $56,754, Patria, Hamburg
PALM—2 bbls, $55, Athos, Colon
PEP—5 cs, $124, Brasilia, Hamburg
1 cs, $16, Alleghany, Kingston
100 cs, $2,406, Manitou, London
SEWING MACH—2 cs, $9, St Paul, Southampton
6 cs, $21, Matanzas, Tampico
16 cs, $57, Idaho, Hull
50 cs, $135, Newlyn, Buenos Ayres
5 cs, $13, Ardandhu, Belize
WHALE—2 cs, $12, Alleghany, Port Limon
PAINT—3 bxs, $13, San Marcos, Porto Rico
3 cs, $28, T Towner, St Croix
2 bbls, $83, Mexico, Havana
5 bbls & 11 cs, $666, Kent, Sydney
2 cs, $18, Yucatan, Havana
12 pkgs, $86, Yucatan, Vera Cruz
2 bbls, $11, Matanzas, Tampico
15 bbls, $115, Tuscarora, London
85 pkgs, $478, Athos, Colon
4 cs, $57, Alps, Hayti
2 cs, $63, Buffon, Rio Janeiro
4 cs, $38, Alleghany, Savanilla
14 cs, $247, Alleghany, Port Limon
4 cs, $58, Manuel L Villaverde, Havana
20 bbls, $1,087, Patria, Hamburg
4 bbls, $80, Jennie A Stubbs, Cayenne
3 cs, $71, Caracas, La Guayra
2 bbls, $32, Ardandhu, Inagua
PAPER FINISH—5 cks, $35, Manitou, London
PETROLEUM—(See Petroleum Clearances on page 22)
PETROLEUM JELLY—23 bbls, $300, Manhattan, London
PITCH—25 bbls, $39, Willowdene, Demerara
1 bbls, $2, Prins Willem V, Hayti
5 bbls, $13, Prins Willem V, Trinidad
2 bbls, $3, Jennie A Stubb, Cayenne
2 bbls, $3, Ardandhu, Inagua
PLUMBAGO—71 cs, 32 kgs & 30 bbls, $1,183, Manitou, London
POTASH—10 cks, $1,910, Marquette, London
BICARB—10 cks, $2,180, Manitou, London
RED LEAD—20 kgs, $110, Yucatan, Vera Cruz
8 kgs, $11, Matanzas, Tampico
2 kgs, $6, Alleghany, Port Limon
ROSIN—1,150 bbls, $7,135, Cevic, Liverpool
25 bbls, $54, San Marcos, Porto Rico
100 bbls, $495, Kent, Sydney
50 bbls, $154, John Sanderson, Shanghai
56 bbls, $200, John Sanderson, Yokohama
10 bbls, $33, Yucatan, Vera Cruz
200 bbls, $627, Athos, Colon
1,510 bbls, $4,136, Heathdene, Calcutta
300 bbls, $798, Heathdene, Bombay
200 bbls, $532, Heathdene, Madras
30 bbls, $105, Alleghany, Kingston
1 bbl, $3, Alleghany, Port Limon
60 bbls, $105, Manuel L Villaverde, Cartagena
1 bbl, $2, Prins Willem V, Hayti
30 bbls, $94, Prins Willem V, Guanta
15 bbls, $49, Prins Willem V, Carupano
300 bbls, $1,196, Athena, Montevideo
2 bbls, $7, Jennie A Stubbs, Cayenne
SARSAPARILLA—15 bls, $850, Aller, Genoa
SENEGA ROOT—4 bls, $230, La Gascogne, Havre
SHEEP DIP—20 cs, $300, John Sanderson, Shanghai
SOAP—4,000 bxs, $14,400, Servia, Liverpool
303 cks, $560, Manhattan, London
9 bxs, $40, Majestic, Liverpool
2 cs, $142, St Paul, Southampton
2 bbls, $23, Mexico, Havana
21 cs, $188, Kent, Sydney
4 cs, $195, John Sanderson, Hong Kong
8 cs, $162, Yucatan, Progreso
657 bxs, $900, Willowdene, Barbadoes
110 bbls, $440, Montcalm, London
500 bxs & 8 pkgs, $740, Athos, Colon
4 cs, $300, Heathdene, Calcutta
450 bxs & 10 cs, $2,441, Erna, Hayti
4 bxs, $198, City of Rome, Glasgow
4 pkgs, $500, Critic, Dundee
12 cs, $188, Alleghany, Kingston
101 cs & 4 bxs, $375, Alleghany, Savanilla
6 cs, $32, Maasdam, Rotterdam
100 cs, $2,100, Newlyn, Buenos Ayres
5 cs, $91, Newlyn, Montevideo
5 bxs & 2 cr, $62, Patria, Hamburg
54 cs & 6,372 bxs, $3,325, Prins Willem V, Hayti
512 cs & 5,109 bxs, $3,863, Alps, Hayti
50 bxs, $74, Prins Willem V, Surinam
30 bxs, $38, Jennie A Stubbs, Cayenne
100 bxs, $53, Ardandhu, Inagua
2 cs, $26, Ardandhu, Puerto Cortez
18 bxs, $44, Ardundhu, Belize
COTTONSEED—200 bbls, $1,011, Holbein, Manchester
STOCK—280 bbls, $650, Cevic, Liverpool
SODA, BICARB—200 kgs, $236, Matanzas, Tampico
CAUSTIC—6 drs, $85, San Marcos, Porto Rico
2 drs, $50, Athos, Colon
6 drs, $23, Yucatan, Vera Cruz
50 drs, $700, Angara, Pernambuco
SAL—100 bbls, $240, Angara, Pernambuco
SPERMACETI—25 bxs, $426, Brasilia, Hamburg
100 cs, $1,560, City of Rome, Glasgow
130 bxs & 25 cs, $2,532, Patria, Hamburg
2 cs, $173, Newlyn, Montevideo
SPONGE—7 bls, $325, La Gascogne, Havre
19 bls, $450, Maasdam, Rotterdam
18 bls, $750, Manitou, London
STARCH—10 bxs, $11, San Marcos, Porto Rico
10 bbls, 25 bgs & 30 bxs, $144, T Towner, St Croix
2 bbls, $15, Mexico, Havana
125 bgs, $632, Holbein, Manchester
125 bgs, $700, Critic, Dundee
200 bgs, $700, Critic, Leith
12 bxs, $18, City of Rome, Glasgow
3 bxs, $6, Alps, Hayti
10 bxs, $11, Alleghany, Kingston
25 bbls, $140, Jennie A Stubbs, Cayenne
POTATO—150 bgs, $1,692, Yucatan, Havana
STEARINE—10 hhds, $900, Cevic, Liverpool
600 tcs, $11,195, Acanthus, Havre
250 tcs, $3,300, St Cuthbert, Antwerp
TALC—2,100 bgs, $1,700, Acanthus, Havre
TALLOW—250 hhds, 23 tcs, $14,191, Cevic, Liverpool
180 tcs, $3,500, Brasilia, Hamburg
1,274 tcs, 151 hhds, 175 pkgs, $33,843, Acanthus, Havre
412 tcs, $7,648, Hesperia, Marseilles
86 tcs, $1,475, Hesperia, Genoa
130 tcs, $1,584, Konigin Luise, Bremen
365 tcs, 195 bbls, $9,650, Kentucky, Stettin
6 tcs, $140, Willowdene, Demerara
21,300 lbs, $1,250, Sorrento, Hamburg
507 hhds, $2,480, Liv, Havre
489 tcs, 100 hhds, $3,690, Holbein, Manchester
63 tcs, $816, Idaho, Hull
75 bbls, 15 tcs, $1,885, Buffon, Bahia
30 hhds, $1,475, City of Rome, Glasgow
50 tcs, $1,110, Buffon, Rio Janeiro
104 bbls, $2,035, Alleghany, Kingston
50 tcs, 5 bbls, $1,167, Alleghany, Savanilla
25 tcs, $300, St Cuthbert, Antwerp
65 tcs, $100, Maasdam, Rotterdam
100 tcs, $2,700, Patria, Hamburg
TAR—1 cs, $2, Yucatan, Havana
20 cs, $25, Yucatan, Vera Cruz
10 bbls, $40, Willowdene, Demerara
5 bbls, $18, Athos, Colon
100 bbls, $413, Heathdene, Calcutta
2 bbls, $8, Alleghany, Kingston
10 cs, $14, Prins Willem V, C Bolivar
10 cs, $13, Prins Willem V, Carupano
1 bbl, Prins Willem V, Hayti
2 bbls, $8, Jennie A Stubbs, Cayenne
5 bbls, $22, Ardandhu, Inagua
5 bbls, $20, Ardandhu, Belize
COAL—2 bbls, $9, Alleghany, Cartagena
2 bbls, $8, Prins Willem V, Hayti
2 bbls, $6, Jennie A Stubbs, Cayenne
TURPENTINE—100 cs, $443, John Sanderson, Shanghai
99 cs, 2 bbls, $755, Yucatan, Havana
20 cs, $95, Yucatan, Vera Cruz
10 cs, $46, Willowdene, Demerara
2,403 gls, $1,200, Fratelli Beverino, Sydney
7 cs, $44, Athos, Colon
50 cs, $245, Heathdene, Calcutta
235 cs, $988, Heathdene, Bombay
2 cs, $6, Erna, Hayti
1,250 cs, $4,911, Peconic, Genoa
100 cs, $431, Onaway, Honolulu
40 cs, $173, Buffon, Bahia
10 cs, $30, Alps, Hayti
1 bbl, $22, Alleghany, Kingston
7 cs, $34, Alleghany, Cartagena
24 cs, 6 bbls, $218, Alleghany, Port Limon
25 cs, $95, Manuel L Villaverde, Havana
5 cs, $23, Willowdene, St Lucia
280 cs, $1,161, Newlyn, Buenos Ayres
2 bbls, $20, Prins Willem V, Curacao
7 cs, $33, Prins Willem V, Carupano
500 cs, $2,125, Erne, Calcutta
2 cs, $9, Jennie A Stubbs, Cayenne
VARNISH—814 gls, $830, Cevic, Liverpool
1,200 gls, $1,150, Brasilia, Hamburg
129 gls, $55, Parana, Montevideo
50 gls, $7, Jersey City, Bristol
130 gls, $81, Majestic, Liverpool
200 gls, $550, Kentucky, St Petersburg
138 gls, $92, Yucatan, Havana
70 gls, $44, Matanzas, Tampico
50 gls, $43, Matanzas, Barbadoes
65 gls, $98, Athos, Colon
260 gls, $152, Seneca, Vera Cruz
1,115 gls, $1,640, Aller, Genoa
150 gls, $97, Alleghany, Port Limon
848 gls, $1,235, Maasdam, Rotterdam
961 gls, $1,550, Patria, Hamburg
WAX, BEES—72 bgs, $2,990, Patria, Hamburg
PAR—1,788 bbls, 280 cs, $23,720, Cevic, Lpool
180 bbls, 1,640 bgs, $18,430, Brasilia, Hmbg
100 cs, $1,000, Com T H Allen, Yokohama
515 bbls, $7,305, St Paul, Southampton
10 bbls, $97, Hesperia, Leghorn
195 bbls, $1,900, Furnesia, Glasgow
175 bbls, 50 cs, $2,790, Holbein, Manchester
225 bbls, $2,420, Idaho, Hull
1 cs, $5, Alleghany, Savanilla
45 bgs, $490, Alleghany, Port Limon
300 bgs, $3,000, Maasdam, Rotterdam
1,551 bbls, $19,375, Manitou, London
250 bbls, $3,880, Patria, Hamburg
WHALEBONE—4 cs, $1,100, La Gascogne, Havre
WHITE LEAD—17 kgs, $60, Matanzas, Tampico
WOOD FILLER—22 bbls, $643, Cevic, Lpool
ZINC, DROSS—515 slabs, $2,500, Majestic, Liverpool
OXIDE—400 bbls, $2,800, Hesperia, Marseilles
100 bbls, $800, Critic, Leith
300 bbls, $2,300, Manitou, London
2 bbls, $41, Caracas, La Guayra

Boston Exports.

GREASE—60 tcs, Kansas, Liverpool
OIL—60 bbls, Cestrian, Liverpool
50 bbls, Kansas, Liverpool
LARD—62 bbls, Kansas, Liverpool
OLEO—375 tcs, Kansas, Liverpool
PAINT—14 cs, Cestrian, Liverpool
SIZING—150 bgs, Kansas, Liverpool
TALLOW—310 tcs, Cestrian, Liverpool

Philadelphia Exports.

BONE BLACK—40 bbls, Belgenland, Liverpool
CARBON—450 pkgs, Osborne, London
DYEWOOD EXTRACT—100 bbls, Belgenland, Liverpool
50 bbls, Siberian, Glasgow
GLUCOSE—100 bbls, Siberian, Glasgow
GREASE—201 bbls & 390 tcs, Belgenland, Liverpool
12 bbls, Nederland, Antwerp
PET—373 bbls & 120 cks, Belgenland, Liverpool
LIME ACETATE—3,533 bgs, Nederland, Antwerp
OIL, CAKE—2,905 bgs, Osborne, London
2,414 bgs, Nederland, Antwerp
LUB—1,265 bbls, Belgenland, Liverpool
997 bbls, Nederland, Antwerp
615 bbls, Siberian, Glasgow
MIN'L COLZA—75 bbls, Belgenland, Liverpool
50 bbls, Siberian, Glasgow
PEP—1 cs, Belgenland, Liverpool
STARCH—2,400 bgs, Avona, Amsterdam
TALLOW—450 tcs, Nederland, Antwerp
WAX, PAR—460 cs & 150 bgs, Nederland, Antwerp
200 bbls, Siberian, Glasgow

Baltimore Exports.

BARK—726 bgs, Bengalia, Hamburg
EXTRACT—27,000 lbs, Batavia, Hamburg
GLUCOSE—250 bbls, Drot, Bristol
150 lbs, Prodano, Leith
GRAPE SUGAR—33,600 lbs, Uistermore, Liverpool
OIL, CAKE—1,639,250 lbs, Bengalia, Hamburg
784,776 lbs, Uistermore, Liverpool
LARD—6 bbls, Drot, Bristol
10 bbls, Queen Wilhelmina, Rotterdam
LUB—240 bbls, Bengalia, Hamburg
160 bbls, Drot, Bristol
OLEO—75 bbls, Bengalia, Hamburg
2,365 tcs, Queen Wilhelmina, Rotterdam
ROSIN—1,700 bbls, Bengalia, Hamburg
250 bbls, Prodano, Leith
STARCH—61,600 lbs, Bengalia, Hamburg
280,000 lbs, Uistermore, Liverpool
STEARINE—5 tcs, Queen Wilhelmina, Rotterdam
TALLOW—20,200 lbs, Bengalia, Hamburg
84,017 lbs, Uistermore, Liverpool
39,000 lbs, Queen Wilhelmina, Rotterdam
22,637 lbs, Batavia, Hamburg
WAX, PAR—63,357 lbs, Drot, Bristol
29,360 lbs, Uistermore, Liverpool
300 lbs, Prodano, Leith

Savannah Exports.

OIL—360 bbls, $1,800, Elma, Hamburg
ROSIN—300 bbls, $1,750, S P Shotter & Co, New Zealand, Rotterdam
PITCH—25 bbls, $115, S P Shotter & Co, New Zealand, Rotterdam
25 bbls, $100, Elma, Hamburg
ROSIN—130 bbls, $500, Iris, London
350 bbls, $1,110, Antwerp N S Co, Iris, Ant
3,970 bbls, $10,700, S P Shotter & Co, Filippo, Genoa

J. L. & D. S. RIKER

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IMPORTERS AND MANUFACTURERS' AGENTS

SOLE AGENTS FOR THE UNITED STATES & CANADA

of THE UNITED ALKALI CO., Limited of Great Britain.

FOR THE SALE OF THEIR VARIOUS BRANDS OF

Bleaching Powder

Crude Drug Department

PARKE, DAVIS & CO., New York.

Alkanet Root
Aloes, Curacoa
Anise Seed
Buchu Leaves
Cardamoms
Cascarilla Bark
Chalk, Precip.
Chamomiles, German
Citric Acid
Colocynth Apples
Ergot
Gum Asafœtida
Gum Tragacanth
Orris Root

NEW NORWEGIAN COD LIVER OIL

1,000 bbls, $2,250, S P Shotter & Co, New Zealand, Rotterdam
3,987 bbls, $9,450, Elma, Hamburg
4,000 bbls, $7,300, Paterson, D & Co, Ohr, Belfast
4,562 bbls, $14,697, Paterson, D & Co, Frithjof, Garston Dock
1,400 bbls, $3,333, Paterson, D & Co, Teutonic, Hull
TURPENTINE—5,000 cks, $104,000, Iris, Lon
8,375 cks, $174,500, Antwerp N S Co, Iris, Antwerp
3,304 cks, $66,000, Jas Farie, Jr, Zanrak, Bristol
600 cks, $11,600, S P Shotter & Co, Filippo, Genoa
2,264 cks, $41,150, S P Shotter & Co, New Zealand, Rotterdam
208 cks, 74 bbls, $5,530, Elma, Hamburg
150 cks, $2,787, Paterson, D & Co, Ohr, Belfast
764 cks, $14,205, Paterson, D & Co, Frithjof, Garston Dock
2,056 cks, $38,338, Paterson, D & Co, Teutonic, Hull

Newport News Exports.

GLUCOSE—682 lbs, $14, Keemun, Glasgow
GREASE—44,400 lbs, $1,554, Albano, Hamburg
OCHRE—63,700 lbs, $1,911, Greenbrier, London
67,800 lbs, $2,034, Albano, Hamburg
OIL CAKE—2,022,854 lbs, $20,228, Albano, Hbg
COTTONSEED—5,200 gls, $1,560, Albano, Hbg
26,000 gls, $7,800, Keemun, Glasgow
TALLOW—95,611 lbs, $4,302, Greenbrier, Lon

New Orleans Exports.

CANDLES—6 bxs, Jarl, Porto Cortez
COTTONSEED—1,305 bgs, Nicaraguan, Lpool
MEAL—4,482 bgs, Afghan Prince, Tyne Docks
2,240 bgs, Nicaraguan, Liverpool
GREASE—100 bbls, Aransas, Havana
OIL—3 bbls, Breakwater, Porto Cortez
1 bbl, Jarl, Porto Cortez
2 bbls, Aransas, Havana
CAKE—1,747 bgs, Afghan Prince, Tyne Docks
3,760 tons, Florida, Copenhagen
COTTONSEED—5,000 bbls, Egyptian Prince, Marseilles
550 bbls, Florida, Copenhagen
PAINT—10 bbls, Aransas, Havana
PETROLEUM—8 bbls, Suidal, Bluefields
40 cs, Breakwater, Porto Cortez
PITCH—240 bbls, Aransas, Havana
ROSIN—1,000 bbls, Europa, Lisbon
100 bbls, Aransas, Havana
SOAP—25 bxs, Suidal, Bluefields
116 bxs, Breakwater, Porto Cortez
5 bxs, Jarl, Porto Cortez
STOCK—25 bbls, Aransas, Havana

San Francisco Exports.

ACID—2 dms, Walla Walla, Victoria
3 cs, Peru, Mexico
1 dm, Edward May, Hilo
AMMONIA—1 cyl, Allen A, Kahulin, H I
5 cyls, Walla Walla, Victoria
1 cyl, Peru, Mexico
3 cyls, W H Dimond, Honolulu
1 cyl, Umatilla, Victoria
BRIMSTONE—4,316 lbs, Walla Walla, Victoria
CANDLES—75 bxs, C D Bryant, Honolulu
COPPER, SULPHATE—757 lbs, Walla Walla, Victoria
FERTILIZER—50 tons, John D Spreckels, Mahukona
51 tons, C D Bryant, Honolulu
75 tons, Edward May, Hilo
GLUE—2 pkgs, Transit, Honolulu
2 pkgs, Walla Walla, Victoria
OIL—1 cs, Allen A, Kahului, H I
11 cs, Walla Walla, Victoria
2 cs, Peru, Central America
88 cs, Peru, Mexico
600 cs, Joseph Russ, Santa Rosalia
9 cs, W H Dimond, Honolulu
5 bbls, Umatilla, Victoria
PAINT—14 cs, Allen A, Kahului, H I
2 cs, Peru, Central America
9 cs, Peru, Mexico
10 cs, W H Dimond, Honolulu
PITCH—10 bbls, Allen A, Kahului, H I
PUTTY—2 bbls, Allen A, Kahului, H I
QUICKSILVER—100 flasks, Peru, Mexico
ROSIN—1 bbl, Edward May, Hilo
SOAP—2 bxs, Peru, Central America
1,000 bxs, Peru, Panama
5 bxs, W H Dimond, Honolulu
10 bxs, Umatilla, Victoria
55 bxs, Edward May, Hilo
SODA, CAUSTIC—6,990 lbs, Joseph Russ, Santa Rosalia
7,836 lbs, Umatilla, Victoria
TAR—25 bbls, Allen A, Kahului, H I
TURPENTINE—10 cs, Allen A, Kahului, H I
6 cs, Peru, Central America
VARNISH—1 cs, Allen A, Kahului, H I
5 cs, W H Dimond, Honolulu
WHITE LEAD—370 kgs, Allen A, Kahului, H I
8 kgs, Peru, Central America

To New York.

GLUE—23 bgs, Peru
STEARINE—78 pkgs, Peru

NEW YORK DOMESTIC RECEIPTS.

Week ending July 6.

ALCOHOL, WOOD—85 bbls, Rogers & Pyatt, L V R R
100 bbls, W S Gray, E R R
BEESWAX—3 bgs, A A Stillwell, H R R R
1 bx, order, Galveston
5 bbls, order, Savannah
6 bxs, order, H R R R
BLOOD, DRIED—2,000 bgs, A Klipstein & Co, P R R
CLAY—131 bgs, order, Savannah
1,310 bgs, Owl Comm Co, Jacksonville
1,545 bgs, Chesebrough Mfg Co, Jacksonville
16 cks, E M Sergeant, Charleston
170 cks, Inter Paper Co, Charleston
100 cks, Moore & M, Charleston
30 cks, order, Charleston
FLAXSEED—20 bbls, T R Bagot, H R R R
FULLERS EARTH—138 bgs, Chesebrough Mfg Co, Jacksonville
GLUCOSE—170 bbls, order, O D S S L
60 bbls, Wood & S, L V R R
100 bbls, Standard Ref Co, P R R
180 bbls, order, D, L & W R R
50 bbls, Standard Ref Co, H R R R
50 bbls, W D Hoag & Co, L V R R
10 bbls, order, P R R
GLUE—200 bgs, order, New Orleans
GREASE—30 bbls, order, P R R
254 tcs, order, C R R of N J
3 bbls, Colgate & Co, D, L & W R R
92 bbls, A L Knight & Co, P R R
100 tcs, export, E R R
50 bbls, E Valk, E R R
75 bbls, D C Link, L V R R
140 bbls, E S Kuh, E R R
HIGHWINES—50 bbls, E Heller & Co, L V R R
345 bbls, Am Dist Co, D, L & W R R
80 bbls, Lanman & K, P R R
590 bbls, J A Webb & Son, D, L & W R R
20 bbls, G Clark, D, L & W R R
195 bbls, Nat Dist Co, P R R
65 bbls, J L Hasbrouck, D, L & W R R
65 bbls, F O Boyd & Co, B & O R R
LEAD—124 pkgs, S H Payne & Co, E R R
1,980 pigs, Inter Metal Co, New Orleans
5,604 pigs, Amer S & R Co, Galveston
OIL—60 bbls, export, E R R
CAKE—3,000 bgs, Munn & J, D, L & W R R
COTTONSEED—965 bbls, order, Savannah
33 bbls, order, O D S S L
101 bbls, E Myer's Sons, Charleston
300 bbls, Hopkins, D & Co, Brunswick
755 bbls, export, O D S S L
500 bbls, Williams & F Co, Galveston
LARD—65 bbls, Manhattan Oil Co, E R R
LINSEED—19 cars, Dean Lin Oil Co, P R R
60 bbls, H W Johns Mfg Co, D, L & W R R
20 bbls, T R Bagot, H R R R
60 bbls, Macy & D, H R R R
1 car, Dean Lin Oil Co, W S R R
180 bbls, Devoe & R, D, L & W R R
60 bbls, Macy & D, E R R
60 bbls, J W Masury & Son, D, L & W R R
LUB—60 bbls, N Y Lub Oil Co, H R R R
72 bbls, Lunham & M, P R R
120 bbls, order, C R R of N J
60 bbls, Funch, E & Co, D, L & W R R
60 bbls, A C Young, E R R
MEAL—250 bgs, A B Gibbs, H R R
30 kgs, 285 bbls, Steward & M, D, L & W R R
1,200 bgs, export, H R R R
400 bgs, W S Travis, L V R R
600 bgs, export, E R R
OLEO—1,200 tcs, export, L V R R
543 tcs, Ammon & P, B & O R R
658 tcs, export, H R R R
1,248 tcs, export, W S R R
979 tcs, export, E R R
130 tcs, export, P R R
RED—392 bbls, J W Elwell & Co, D, L & W R R
ROSIN—140 bbls, order, Savannah
PITCH—15 bbls, order, Wilmington
55 bbls, order, Savannah
POTASH—10 cks, J Brower & Co, H R R R
7 cks, order, H R R R
1 ck, J Brower & Co, E R R
3 cks, order, Balto Trans Co
9 cks, Littlejohn & P, Balto Trans Co
16 cks, order, P R R
ROSIN—4,630 bbls, order, Savannah
586 bbls, order, O D S S L
615 bbls, Baily & M, Jacksonville
44 bbls, Pitts Bros & Co, Jacksonville
1,415 bbls, Paterson, D & Co, Brunswick
50 bbls, Tolar, H & Co, Brunswick
104 bbls, Baily & M, Brunswick
248 bbls, Peacock & H Co, Brunswick
2,642 bbls, order, Georgetown
225 bbls, Baily & M, Georgetown
430 bbls, L Breslauer, Georgetown
1,072 bbls, Tolar, H & Co, Georgetown
14 bbls, order, Wilmington
108 bbls, Standard N S Co, Jacksonville
38 bbls, Peacock & H Co, Jacksonville
SODA ASH—60 bbls, 50 kgs, Edw Hill's Sons, H R R R
575 bgs, J Pyle & Sons, H R R R
100 bgs, A Klipstein & Co, H R R R
252 bgs, 50 dms, 150 bbls, order, O D S S L
250 kgs, G H Embree, P R R
190 bgs, B T Babbitt, H R R R
50 bgs, Hygienic Chem Co, H R R R
100 bgs, E Morgan's Sons, H R R R
CAUSTIC—41 dms, Champion Chem Wks, H R R R
50 dms, E Morgan's Sons, H R R R
SPONGE—33 bls, Lebess Sponge Co, Key West
44 bls, Lasker & B, Key West
100 bls, Vollman Sponge Co, Key West
141 bls, order, Savannah
STARCH—650 bxs, F H Leggett & Co, H R R R
110 bgs, 2,130 pkgs, 320 bxs, Duryea & Co, P R R
150 bbls, F Rose & Co, E R R
150 bgs, C Morningstar, L V R R
110 bbls, N Y Baking P Co, L V R R
1,925 bxs, 20 bbls, Oswego Starch Co, H R R R
100 bxs, 25 bbls, Nat Starch Co, H R R R
45 bbls, H Kohnstamm & Co, P R R
150 bbls, F Rose & Co, L V R R
700 cs, J Randles, E R R
150 bbls, order, C R R of N J
STEARINE—389 tcs, export, E R R
73 pkgs, export, P R R
75 tcs, Armour & Co, P R R
TALLOW—13 bbls, H W Calef, H R R R
584 tcs, export, P R R
434 tcs, export, E R R
60 bbls, H W Calef, D, L & W R R
20 bbls, J Marshall & Sons, W S R R
10 bbls, Welch H & C Co, L V R R
10 bbls, Colgate & Co, D, L & W R R
2 cs, order, Jacksonville
200 tcs, export, H R R R
57 tcs, E Valk, P R R
18 bbls, W D Vandenhove & Co, W S R R
25 tcs, export, L V R R
240 tcs, 12 bbls, order, C R R of N J
TAR—39 bbls, order, O D S S L
47 bbls, Tolar, H & Co, Georgetown
236 bbls, order, Wilmington
TURPENTINE—893 bbls, order, Savannah
171 bbls, order, O D S S L
411 bbls, Baily & M, Jacksonville
150 bbls, Pitts Bros & Co, Jacksonville
203 bbls, Peacock, H & Co, Jacksonville
50 bbls, Baily & M, Brunswick
10 bbls, Peacock, H & Co, Brunswick
322 bbls, Tolar, H & Co, Georgetown
24 bbls, Baily & M, Georgetown
64 bbls, L Breslauer, Georgetown
212 bbls, Paterson, D & Co, Wilmington
155 bbls, F W Blossom, Wilmington
92 bbls, Tolar, H & Co, Wilmington
80 bbls, F S Clark, Wilmington
49 bbls, Baily & M, Wilmington
50 bbls, M W Larendon, Wilmington
25 bbls, W J Keenan, Wilmington
13 bbls, S P Shotter & Co, Wilmington
193 bbls, order, Wilmington
333 bbls, Pratt Wks, Jacksonville
90 bbls, M W Larendon, Charleston
CRUDE—18 bbls, Baily & M, Wilmington
15 bbls, S P Shotter & Co, Wilmington
30 bbls, order, Wilmington

Total Domestic Receipts.

At New York for week ending July 6, 1899.

Alcohol	bbls	....	2,369
Beeswax	pkgs	15	323
Boneblack	bgs	....	9,901
Borax	bgs	....	122,782
Cottonseed	bgs	....	2,325
Ashes	bgs	....	3,823
Cake	bgs	....	....
Hulls	bgs	....	240
Meal	bgs	....	40,012
Flaxseed	bu	60	204,042
Glucose	bbls	620	64,531
Glue	pkgs	200	1,101
Grease	pkgs	744	27,322
Highwines	bbls	1,210	43,552
Lead	pigs	7,808	480,384
Mustard seed	bgs	....	1,320
Oil cake	bgs	3,000	153,670
Cottonseed	bbls	2,654	187,170
Fish	bbls	....	1,250
Lard	bbls	65	2,142
Lubricating	bbls	372	11,442
Oleo stock	tcs	4,758	92,399
Pitch	bbls	70	3,061
Quicksilver	flks	....	6,707
Rosin	bbls	12,623	202,174
Soap stock	bbls	....	14,243
Spelter	pcs	....	90,135
Sponges	bls	318	4,483
Starch	pkgs	6,735	95,160
Stearine	pkgs	537	6,613
Sumac	bgs	....	1,406
Tallow	pkgs	1,745	33,956
Tar	bbls	322	16,890
Turpentine, crude	bbls	63	802
Spirits	bbls	3,690	61,062

Boston Domestic Receipts.

Week ending July 6.

COTTONSEED MEAL—840 bgs, Savannah
42 tons
GREASE—215 bbls
OIL, COTTONSEED—10 bbls, Savannah
ROSIN—5 bbls, Savannah
PITCH—10 bbls, Savannah
ROSIN—2,880 bbls, Savannah
TALLOW—136 bbls
TURPENTINE—244 cks, Savannah

Baltimore Domestic Receipts.

Week ending July 5.

CLAY—678 bgs, 36 cks, Savannah
OIL, COTTONSEED—60 bbls, Savannah
ROSIN—12 bbls, Savannah
PHOSPHATE—1,729 tons, Charleston
ROSIN—3,518 bbls, Savannah
TURPENTINE—346 bbls, Savannah

Charleston Domestic Receipts.

Week ending July 5.

ROSIN—362 bbls
TURPENTINE—38 cks

Savannah Domestic Receipts.

Week ending July 5.

ROSIN—23,864 bbls
TURPENTINE—10,590 bbls

Wilmington Domestic Receipts.

Week ending July 5.

ROSIN—1,554 bbls
TAR—309 bbls
TURPENTINE—706 cks
CRUDE—302 bbls

New Orleans Domestic Receipts.

Week ending July 5.

CANDLES—460 bxs
COTTONSEED—9,600 bgs, 2 cars
CAKE—493 bgs
MEAL—16 cars, 18,526 bgs
GLUCOSE—7 cars
GLUE—200 bgs
LEAD—40,795 pigs
OIL—60 bbls, 27 cars
CAKE—3,102 bgs, 1 car
COTTONSEED—280 bbls
PHOSPHATE—8 cars
PITCH—1 car
ROSIN—4 cars, 642 bbls
SOAP—563 bxs
STARCH—1 car
TURPENTINE—5 cars, 314 bbls
WHITE LEAD—1 car

San Francisco Domestic Receipts.

Week ending July 1.

ALUM—6 bbls, D, C & H Co, via New York
ARCHILLA—678 bls, Meyer, Wilson & Co, via La Paz
BEESWAX—11 bgs, C D Bunker & Co, via Ensenada

MERCK & CO.

Carbolic Acid, Crystals, Silver Label.
Sugar of Milk, Impalpable Powder.
Boric Acid C.P., Crystals and Impalpable Powder.
Aqua Levico, Strong and Mild.

University Place and Eighth Street, **NEW YORK.**

Down-Town Office, 100 William Street.

DAMIANA—5 bls, 9 bgs, J F Ulrich, via La Paz
80 bgs, 15 bls, W Loaiza & Co, via La Paz
16 bls, W Loaiza & Co, via San Jose de Cabo
4 bgs, I Gutte, via San Jose de Cabo
DYEWOOD—100 kgs, via New York
27 bbls, Eagle Tannery, via New York
LAMPBLACK—60 bbls, F Co, via New York
OIL—177 bbls, via New York
LINSEED—50 cs, via New York
LUB—256 bbls, via New York
10 cs, E Sergent, via New York
PAINT—5 cks, 7 cs, 22 bbls, 4 kgs, F Co, via New York
7 bbls, 12 kgs, C T & Co, via New York
14 cs, Smith & Young, via New York
10 bbls, 3 kgs, 25 cs, via New York
POTASH—15 cs, Justin Caire & Co, via New York
SOAP—455 cs, 255 bxs, via New York
VARNISH—16 cs, Magner Bros, via New York

TOTAL IMPORTS AT NEW YORK.

In the following table we give the total imports, in packages, unless otherwise specified, and their values at the port of New York, for the week ending July 6, 1899:

	Quantity.	Value.
Bottles	....	1,274
Glass, plate	18	2,014
Glass, window	2,567	5,893
L. G. plates	45	4,400
Ambergris	1	41
Arsenic	100	1,482
Acid, carbolic	162	4,079
Acid, citric	202	395
Acid, oxalic	50	2,207
Acid, salicylic	25	783
Acid, all other	79	1,548
Aniline colors	923	56,235
Aniline salt	97	4,319
Ammonia, muriate of	26	845
Ammonia, sal	140	1,082
Ammonia, sulph	1,040	6,238
Alum	78	431
Argols	2,229	82,782
Albumen	37	1,572
Alizarine	192	10,628
Asphalt	....	8,650
Balsam, copaiba	20	1,388
Balsam, Peru	1	56
Balsam, all other	7	66
Bark, cincho	422	17,678
Bark, all other	11	52
Barytes, sulph	5	38
Barytes, other	61	342
Bay rum	32	1,192
Bleach powder	343	3,407
Brimstone	....	18,272
Bronze powder	....	7,892
Buchu leaves	27	785
Butter, cocoa	70	3,896
Chalk	....	788
Cantharides	3	230
Chem salts	252	9,615
Citrate of lime	34	4,195
Cobalt	2	740
Civet	2	713
Colocynth	5	245
Cuttlefish bone	155	575
Dextrine	650	4,027
Divi divi	108	160
Dyewood, ext of	405	1,654
Ergot	5	147
Flowers, insect	75	3,091
Flowers, safron	15	118
Flowers, all other	65	914
Fullers earth	1,400	902
Gambier	9,714	46,369
Gelatine	236	6,625
Glycerine	650	37,650
Gum, arabic	79	5,774
Gum, asafoetida	9	452
Gum, aloes	339	984
Gum, Benjamin	36	573
Gum, benzoin	4	237
Gum, chicle	674	12,973
Gum, camphor	144	6,778
Gum, damar	25	492
Gum, guiac	5	106
Gum, kowrie	20	666
Gum, licorice	1	16
Gum, myrrh	10	245
Gum, shellac	528	12,102
Gum, senegal	175	148
Gum, substitute	10	674
Gum, traga'nth	117	3,582
Gum, all other	94	3,926
Glue	177	3,994
Insect powder	15	62
Indigo	26	3,692
Indigo, ext of	15	831
Iodine	58	14,036
Isinglass	10	635
Juniper berries	100	160
Laurel leaves	15	71
Leeches	10	108
Locust beans	101	295
Manganese	26	778
Manganese ore	55	500
Magnesite	7,109	8,665
Man salt	....	8,334
Mica	33	474
Morphine	3	4,625
Myrbolanes	800	596
Nut galls	90	2,149
Orchilla liq.	15	591
Oxide, zinc	109	1,504
Oil, aniline	26	2,639
Oil, almonds	9	331
Oil, bergamot	124	5,694
Oil, castor	50	532
Oil, cassia	135	8,668
Oil, cod	150	1,904
Oil, cocoanut	142	15,590
Oil, creosote	250	720
Oil, croton	1	102
Oil, dead	1,000	776
Oil, fusel	189	4,908
Oil, geranium	3	374
Oil, Haarlem	50	610
Oil, juniper	10	436
Oil, lavender	38	4,608
Oil, lemon	271	5,031
Oil, neroli	4	1,467
Oil, orange	71	2,094
Oil, olive	8,049	51,035
Oil, palm	35	3,359
Oil, rapeseed	51	944
Oil, rosemary	1	6
Oil, sesame	10	341
Oil, sandalwood	2	132
Oil, thyme	7	742
Oil, other ess	27	1,937
Oil, all other	170	2,300
Opium	6	1,354
Paints, unspecified	....	14,723
Paints, Berlin blue	8	250
Paints, blanc fixe	15	181
Paints, chro yellow	1	2
Paints, colcothar	37	388
Paints ,drop black	45	586
Paints, iron oxide	43	331
Paints, lithophone	66	846
Paints, ochre	614	2,200
Paints, orange min'l	37	1,044
Paints, red lead	108	2,865
Paints, sienna	47	1,369
Paints, umber	40	263
Paints, venetian red	201	659
Paints, vermilion	3	66
Paints, white lead	189	1,518
Potash, bicarb	40	342
Potash, carb	271	7,693
Potash, sulph	250	940
Potash, ext of	10	363
Potato starch	300	1,530
Plumbago	194	6,946
Quinine	153	31,535
Reg antimony	70	3,573
Root, arrow	30	335
Root, Ipecac	2	974
Root, jalap	13	175
Root, licorice	6,384	35,219
Root, orris	120	753
Root, sarsaparilla	51	602
Root, all other	72	1,213
Sage leaves	60	148
Senna	69	1,466
Soda, ash	657	3,271
Soda, sulphate	21	132
Soda, bicarb	1	3
Soda, chlor	600	4,745
Soda, sal	56	122
Sponges	500	7,079
Stearine	67	956
Sulphur ore	....	25,932
Sumac	140	396
Sumac, ext of	50	878
Talc	1,073	748
Tonca beans	10	226
Ultramarine	31	591
Vanilline	14	4,283
Vanilla beans	36	38,858
Varnish	7	210
Venice turp	17	310
Verdegris	3	478
Other	....	56,204
Bristles	165	31,268
Rennets	21	3,373
Alcohol	6	188
Bismuth	8	2,733
Dutch metal	6	907
Metal scrap	6	1,217
Cassia	221	2,277
Cloves	700	5,764
Ginger	860	4,059
Mustard	249	6,623
Nutmegs	58	1,304
Pepper	3,483	41,970
Pepper shells	149	1,618
Pimento	424	3,714
Dyewood	....	623
Fustic	....	1,221
Corkwood	....	449
Logwood	....	11,635
Candles	....	198
Clay	....	6,733
Carbon	....	1,933
Cork	....	15,935
Portland cem	16,701	21,189
Perfumery	214	10,291
Powder, polishing	....	1,459
Seed, canary	151	589
Seed, caraway	25	69
Seed, cardamom	25	894
Seed, cummin	59	575
Seed, hemp	441	1,997
Seed, millet	200	401
Seed, mustard	75	210
Seed, poppy	401	2,274
Seed, rape	4	13
Seed, other	....	1,332
Soap, castile	200	406
Soap, all other	109	8,634
Soap, stock	150	2,206
Stone, pumice	....	758
Tapioca	6,033	16,212
Wax	....	5,038
Whalebone	....	53

GOODS ON THE WAY TO THE UNITED STATES BY SAIL.

Ceylon.

TO NEW YORK.

Paramita, 10,000 bls gambier.
Maria, 11,000 bls gambier
Berlin, 8,000 bls gambier

TO THE UNITED STATES.

Condor (ss), 8,400 bgs nitrate soda.
Glenclova, 28,000 bgs nitrate soda.
Eskasoni, 22,000 bgs nitrate soda.
Lancelot (ss), 30,000 bgs nitrate soda
Holliswood, 11,000 bgs nitrate soda.
Capac (ss), 20,000 bgs nitrate soda.
Coya (ss), 20,000 bgs nitrate soda.
Annasona, 18,000 bgs nitrate soda.
Craigsland, 14,600 bgs nitrate soda.
Juanita North (ss), 45,000 bgs nitrate soda.
Queen Margaret (ss), 20,000 bgs nitrate soda.
Cacique (ss), 20,000 bgs nitrate soda.
Brynhilda, 16,000 bgs nitrate soda.
Condor (ss), 20,000 bgs nitrate soda.
Nellie Troop, 16,200 bgs nitrate soda.
City of Glasgow, 13,300 bgs nitrate soda.
Sahara (ss), 43,000 bgs nitrate soda.
Mohican (ss), 25,000 bgs nitrate soda.
Centurion, 20,000 bgs nitrate soda.
Garibaldi, 16,000 bgs nitrate soda.

RECORD OF VESSELS.

Port and Name.	Sailed.
Singapore.	
Paramita	March 11.
Maria	May 20.
Berlin	April 15.
W. C. S. America.	
Condor (ss)	Due July.
Glenclova	Due July.
Eskasoni	Due August.
City of Glasgow	Due July.
Nellie Troop	Due July.
Lancelot (ss)	Due August.
Holliswood	Due September.
Capac (ss)	Due September.
Coya (ss)	Due September.
Annasona	Due July.
Craigsland	Due July.
Juanita North (ss)	Due August.
Queen Margaret (ss)	Due September.
Cacique (ss)	Due October.
Brynhilda	Due November.
Condor (ss)	Due December.
Sahara (ss)	Due July.
Mohican (ss)	Due September.
Centurion	Due October.
Garibaldi	Due February, 1900.

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MANUFACTURING CHEMISTS

HIGH GRADE

Sulphuric, Muriatic, Nitric, Acetic

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Special 98% and Mixed Acid for Explosives

SULPHATE OF ALUMINA

CRYSTAL ALUMS, C. T. S., FILTER ALUMS

HIGH TEST SALT CAKE, For Glass Manufacturers.

CALCINED AND NEUTRAL GLAUBER'S SALT. BLUE VITRIOL. TIN CRYSTALS.
BISULPHATE OF SODA. MURIATES OF TIN, IRON AND ANTIMONY, ETC., ETC.

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Refiners of Copper
Manufacturers of Blue Vitriol
Special Laurel Green
The BEST Insecticide in the World.

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CHLORIDE MANGANESE, CARBONATE OF POTASH, HYPOSULPHITE OF SODA
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CHEMICAL MARKET.

NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 36 and 37.

Saturday Evening, July 8, 1899.

Trade has been only fair since the month opened, as many of the large dealers have been stock taking. This with the holidays has made it more or less a broken week. There is no truth in the report that one of the large alkali works has been sold as reported in the daily press. There is a fair inquiry for alkali and caustic soda for forward delivery, but spot stocks continue light. Bicarb soda is being taken freely for export with the increased demand also for home consumption. Brimstone has arrived freely and prices are easier, and the same may be said of nitrate of soda. Chlorate of potash is in better request, and prices are hardening. Arsenic is firmer and blue vitriol is also stronger. The other light chemicals and acids show few changes, as detailed below. In their letter Messrs. J. P. Brunner & Co., of Liverpool, say: "Business in the heavy lines of chemicals is rather less active this week, but there is a firm tone all round. Soda ash in fair request, and prices firm. We quote maximum range for tierces about as follows: Leblanc ash, 48%, £4 5s. to £4 10s. per ton; 58%, £4 10s. to £4 15s. per ton, net cash. Ammonia ash, 48%, £4 to £4 5s. per ton; 58%, £4 5s. to £4 10s. per ton, net cash. Bags, 5s. per ton under price for tierces. Soda crystals find a ready sale, and generally quoted at £2 17s. 6d. per ton, less 5% for barrels, with special quotations for a few favored markets. Bags, 7s. per ton under price for barels. Caustic soda is in moderate supply, and, if anything, prices are inclined to stiffen. We quote spot prices as follows: 60%, £6; 70%, £7; 74%, £7 10s.; 76%, £7 15s. to £7 17s. 6d. per ton, net cash. Bleaching powder is unchanged and £4 15s. per ton net cash is about nearest value for hardwood packages. Chlorate of potash is very steady, and moving off in a moderate fashion at 3½d. to 3⅝d. per lb. for crystals, and 3⅝d. to 3¾d. per lb. for powdered, as to quantity. Bicarb soda is selling at varying prices, according to destination, ranging from £5 5s. to £6 16s. per ton, less 2½%, for the finest quality in one cwt. kegs, with usual allowances for larger packages. Sulphate of ammonia is quiet, but a shade firmer at £12 10s. to £12 12s. 6d. per ton, less 2½%, for good gray 24@25% in double bags, f. o. b. here, as to quality. Nitrate of soda is easier at £8 to £8 5s. per ton, less 2½%, for double bags f. o. b. here, as to quantity and quality."

Heavy Chemicals.

ALKALI.—Since the month opened trade has been rather quiet. This arises more from the fact that the bulk of the glass factories have shut down for their usual summer vacation. Meanwhile domestic makers will be enabled to accumulate stocks of which they have been unusually short for several months past. Not in many years have makers done as large a business as they have in the past six months; in fact, there has been no season in which they began operations with which to make a comparison. The outlook for the balance of the year is even better, notwithstanding the air is full of rumors of new works to be erected in the near future. There have been sales of several round lots of domestic high test for delivery over next fire at 67½c. for bags f. o. b. works. For prompt delivery there is still a scarcity, and 70c. for bags f. o. b. works is generally quoted. In this section the jobbing demand is good, thus reducing stocks in dealers' hands. Prices range from 80@90c., according to test, make and seller. Better demand is reported for high test B. M. and sales are being made at 80@85c., as to quantity and seller.

BICARB. SODA.—There is an increased export demand and several round lots have been booked for prompt and forward. The home trade is also better and a fair amount is daily going into channels for consumption. Values remain steady at 1⅛@1¼c. for ordinary and 3¼@3½c. for extra grades f. o. b. usual terms.

CRYSTAL CARBONATE.—Since the warm weather set in there has been an unusual demand for this article. Several sales are reported for spot and nearby parcels at 1.60c. for car lots and 1.70c. and upward for jobbing parcels.

CAUSTIC SODA.—There has been considerable business done in domestic high test for 1900 delivery at 1.45c. f. o. b. works. There is still a scarcity of stocks for prompt delivery and second hands are meeting the wants of the trade at 1.50@1.55c. f. o. b. works, as to make and quantity. In this section the jobbing trade is fairly good and is satisfied at prices ranging from 1.60@1.70c., according to test, make and seller. There has been considerable business done in powdered at 2⅛@2¼c. for 60 per cent., 2¼@2⅜c. for 70 per cent., 2⅜@2½c. for 74 per cent., and 2¾@3c. for almost chemically pure.

SAL SODA.—Since the advance noted in our last trade has been rather quiet, as about all the large consumers are under contract. Domestic makers report an increased spot demand, all of which is satisfied at 70@80c., according to style of packing, f. o. b., usual terms. Concentrated is also in better request with sales reported for prompt and forward delivery at 1.35@1.60c. f. o. b., usual terms, for "Arm and Hammer." Foreign is in better request for arrival at 62½@65c., as to date of shipment.

MONOHYDRATE CRYSTALS. — No change as yet has been made in values, which remain firm at 1.35@1.65c., and for "Snowflake" at 1⅛c. f. o. b. works.

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If you desire Chemicals of any kind please write to us for prices or information.

usual terms. The demand is good, both for prompt and forward delivery.

BLEACHING POWDER.—Since the month opened there has been an increased demand for prime high test makes at prices ranging from 1.42½@1.50c. for Liverpool, as to test and make. Outside makes are selling fairly good at 1.25@1.40c., as to test, make and seller.

Acids.

ACETIC.—The usual jobbing demand prevails for prompt and forward delivery. It is intimated that prices may be advanced in the near future. For the present we quote 1½c. and upward, as to make and delivery point.

MURIATIC.—Makers all report the past six months as being the best they have had in many "moons." The indications are that the balance of the year will be as good. Values remain firm at 1.15c. and upward, as to strength and quantity.

OXALIC.—There has been a better demand for spot and nearby delivery, with sales of 60 casks reported at 6¼c. and upward, as to make and quantity.

TARTARIC.—As the warm weather advances there is an improved consumption of this article. As yet makers have made no change in values, which remain firm at 31½@32c. for crystals and 32@32½c. for powdered, less usual discount terms.

SULPHURIC.—There is talk around the trade of an early advance in prices for export. There has been considerable inquiry all around since the month opened, both for home consumption and for export. Makers all report a satisfactory business for the first half of the year, and the indications are that the last half will even be better. Values remain firm at 1.10c and upward for 66 degrees, as to the size of the order.

Miscellaneous Chemicals.

ACETATE OF LIME.—Since the month opened there has been more inquiry for export, but the advance in ocean freights still hampers business. The home demand is only fair. Prices remain steady at .80@.85c. for brown and 1.25@1.30c. for gray, as to quantity and delivery point.

ALUM.—Contract deliveries have further been increased since the month opened. There has also been more new business, as consumers are anticipating the future. Values remain steady at 1.65@1.75c. for lump and 1.75@1.85c. for ground, as to quantity and delivery point. There is also more inquiry for sulphate of alumina for prompt and forward delivery at 1.20@1.50c., as to quantity and delivery point.

ARSENIC.—Cables report an advancing foreign market, which is reflected in higher prices being asked by regular dealers, who are quoting 4⅝c. and upwards. Outside speculative lots are selling in a limited way at 4⅜@4½c. Red is quiet at 7¾@8½c., as to quality and packing.

BRIMSTONE.—The free arrivals the past week has eased spot prices, which may be quoted at $21.00@21.50 per ton. Shipments are held steady at $20.50@20.75 per ton for July-August, as to quantity.

BLUE VITRIOL.—The firm tone of the copper market tends to strengthen the ideas of makers, who are offering only in a limited way at 5¾c. and upward. Some of the paris green makers are still selling their surplus stock at 5⅜c., at which 2 cars were sold.

CHLORATE OF POTASH.—Only a small retail demand is reported for spot and nearby parcels at 9¼@9½c. for crystals and powdered at 9¾@10c., as to make and seller.

CHLORATE OF SODA.—There has been rather more inquiry for forward delivery, and several sales are reported at 9⅞@10c., as to make and quantity.

CAUSTIC POTASH.—No change in the situation, which remains a strong one, both for prompt and forward delivery, at 4@5c., as to test and quantity.

CARBONATE OF POTASH.—As noted in our last, prices have been advanced, and may now be quoted at 3½@5½c., as to test and quantity. Considerable business has been done for forward delivery within the range.

CREAM OF TARTAR.—No change in the situation, which remains a strong one. Since the month opened there has been an increased home demand, all of which is satisfied at 23½@24c. for powdered, usual terms.

GLAUBER'S SALT.—Competition continues sharp, but prices are well sustained. There has been more inquiry for prompt and forward delivery, and several sales are reported at 65@85c., as to the size of the order and delivery point.

NITRATE OF SODA.—Owing to free arrivals and a slack demand, prices have eased off, and spot may be quoted at 1.60@1.65c., as to quantity and seller. Shipments are held firm at 1.62½@1.65c., as to date of arrival. In their circular Messrs. Parsons & Petit say:

The following are the actual shipments of nitrate of soda from the West Coast for June during the past five years:

	1899.	1898.	1897.
To Europe.....	63,000	52,000	51,000
To America.....	9,000	2,000	None
(In tons).....	72,000	54,000	51,000

Total shipments from Jan 1 to June 30:

(As cables.)	1899.	1898.	1897.
To Europe.....	508,000	360,000	307,000
To America.....	56,500	66,300	40,500
(In tons).....	564,500	426,300	347,500

Also loading on July 1:

	1899.	1898.	1897.
To Europe.....	81,000	32,000	66,000
To America.....	7,500	4,000	9,000
(In tons).....	88,500	36,000	75,000

Quantity actually on the way, up to July 1, for the east coast of the United States was 213,400 bags. Spot stock in store at the various Eastern ports of the United States July 1 estimated 30,000 bags.

SAL AMMONIAC.—There has been an active demand for white grain, both for prompt and forward delivery. Sales are reported of 50 casks at 5¾@6c. Rough is quiet at 5¾c., and lump at 8¼c.

SUGAR OF LEAD.—Since the month opened there has been a decided increase in contract deliveries to the home trade. Values remain steady at 7½@7¾c. for white crystals, and 5¼@5½c. for brown, less usual discount terms.

SALTPETER.—No change in the situation, which is still a dull one at 3½c. and upward for spot goods in a retail way. Refined is quiet at 4@5¼c., as to grade and quantity. In their circular Messrs. C. P. Morris & Son say: Stock on hand January 1, bags, 1899, 2,822; 1898, 15,468; 1897, 19,440. Arrived from January to May, 1899, 26,749; 1898, 22,499; 1897, 32,397. June, 1899, 12,556; 1898, 5,992; 1897, 11,373. Totals, 1899, 42,127; 1898, 43,959; 1897, 63,210. Consumption from January to May, 1899, 22,015; 1898, 34,669; 1897, 31,479. June, 1899, 8,003; 1898, 4,210; 1897, 10,260. Totals, 1899, 30,018; 1898, 38,879; 1897, 41,739. Consumption for year, 1898, 77,917; 1897, 81,109. Stock on hand July 1, 1899, 12,109; 1898, 5,080; 1897, 21,471. On the way by mail advice, 1899, 6,551; 1898, 11,916; 1897, 20,348. On the way by cable advice, 1899, nil; 1898, nil; 1897, 2,500. Apparent supply, 1899, 18,660; 1898, 16,996; 1897, 44,319. Prices current—Spot, 1899, 3.40c.; 1898, 5c.; 1897, 3¼c.; on the way, 1899, 3⅜c.; 1898, 5c.; 1897, 3c. Arrived from Calcutta—June 1, per steamship Angola, 2,882; June 13, per steamship Bostonian, 740; June 21, per steamship Dunblane, 2,406; June 23, per steamship Acara, 6,528; total, 12,556. Sailed from Calcutta—June 2, per steamship Bucentaur, 1,751; June 3, per steamship Almora, 4,800; total, 6,551.

Ammoniates, Potashes, Etc.

Considering the light stocks available of the leading ammoniates for prompt delivery, a fair business has been done both for prompt and forward delivery. Sulphate of ammonia has eased off and may now be quoted at $3.12 for nearby parcels, and at $3.10 for August shipment. Domestic is also easier at $3.10. Blood is still in light stock, and held steady at $1.80@1.85 f. o. b. Chicago. Tankage is quiet but is held firm at $16@16.50 per ton f. o. b. Chicago for 10 and 20. Azotine is dull at $1.80. Calcutta bone meal is in good request for arrival at $24.50@25 per ton. Domestic bone steamed ground is steady at $19@21 per ton, as to grade. Raw is scarce and held firm at $24 per ton. Fish scrap is quiet but firm at $19@19.50 for dry and $10@10.50 per ton for wet f. o. b. factory. In their letter Messrs. Thos. H. White & Co. say:

"The market for ammoniates the past week has been very dull. We have no transactions of any importance to report. Prices remain unchanged from those stated in our advices of the 1st, viz.: Crushed tankage, 7 and 25, $14@14.25 per ton, f. o. b. Chicago; crushed tankage, 10 and 12, $16.50@17 per ton, f. o. b. Chicago; crushed tankage, 9½ and 15, $16@16.50 per ton, f. o. b. Chicago; crushed tankage, 9 and 20, $15.50@16 per ton, f. o. b. Chicago; concentrated tankage, $1.50@1.52½ per unit, f. o. b. Chicago; hoofmeal, $1.50@1.55 per unit, f. o. b. Chicago; ground blood, $1.77½@1.80 per unit, f. o. b. Chicago; crushed tankage, $1.80@1.82½ and 10 c. a. f. Baltimore. Sulphate of ammonia is quiet. Foreign is quoted at $3.15 c. i. f. New York and Baltimore. Speculative offerings for the next six months are reported at $3.07½@3.10. Domestic has been offered in a small way in competition at the same price."

(Special Correspondence to the Reporter.)

Production of Phosphate Rock in 1898.

Washington, July 7, 1899.

Through the courtesy of the Director of the United States Geological Survey the Reporter's correspondent is enabled to present the following abstract of the annual report of the Survey on the production of phosphate rock in the United States for 1898:

"The production of phosphate rock was without material change in the five years from 1893 to 1897 inclusive, the smallest output during that period being 930,779 long tons in 1896; the largest, 1,039,345 long tons, in 1897. The annual average production for the five years was 989,398 long tons. The production in 1898 showed a notable increase, amounting to 1,308,885 long tons, 269,540 long tons, or 26 per cent., more than the output in 1897, and 319,487 long tons, or 32 per cent., more than the average production during the preceding five years. The increased production was made up by a gain of a little over 48,500 long tons from Florida, an increase of about 42,000 tons from South Carolina and of approximately 180,000 tons in Tennessee. The increase in Tennessee was nearly twice as much as that of Florida and South Carolina combined, and almost equal to the total production in the State for the three preceding years.

"The value of the product in 1898, while more than that of 1896 or 1897, was less than that of any other year since 1891, with one exception (1892). In 1891 the product was only 45 per cent. of the product of 1898, whereas the value of the product in the latter year was $200,000 less than that of 1891. The average price for rock in 1891 was about $6.20; in 1898 it was $2.65.

"Prior to 1892, when the chief sources of supply were the land and river phosphate beds of South Carolina, prices were comparatively steady at from $5 to $6 per ton. In 1892 and 1893, with the large production from Florida, prices began to go down, and much of this decline was due rather to the inferior rock thrust upon the market as a result of speculating fever and 'boomers' than the actual production. By the time the phosphate mining industry of Florida had settled down to a firmer and legitimate basis, the Tennessee product became a factor in the market. The effect of the bringing in of this new supply is exhibited significantly in the increase for 1897 and 1898.

	1897		1898	
Florida.	Quantity.	Value.	Quantity.	Value.
Hard rock..	360,147	1,063,713	366,810	1,396,108
Soft rock...	2,300	4,600	.....	.....
Land pebble	92,132	180,794	155,084	293,688
River pebble	97,763	244,408	79,000	158,000
Totals ...	552,242	1,493,515	600,894	1,847,796
South Carolina—				
Land rock..	267,386	748,050	298,610	856,225
River rock.	90,900	238,522	101,274	251,047
Totals ...	358,280	986,572	399,884	1,107,272
Tennessee .	128,723	193,115	308,107	498,392
Gr. total..	1,039,345	2,673,202	1,308,885	3,453,460

"The statistics of exportation give the following figures for the years 1897 and 1898:

	1897.	1898.
To United Kingdom ports.....	33,073	32,269
To Baltic ports	95,646	100,562
To Continental ports	186,516	207,046
To Mediterranean ports	32,627	15,986
Total foreign shipments	347,862	356,863

"The substantial yearly increase in shipments shows that the Florida high grade rock continues in favor with the super-phosphate manufacturers of Europe. The figures show that a total of 2,134,895 long tons of high grade phosphate rock have been shipped to European manufacturers during the nine years of exploitation.

"In commenting upon the condition of the industry in 1897 Messrs. Auchincloss Bros., of New York, state that in their opinion the hard rock industry was emerging from the unhealthy state which had prevailed for several years. This opinion seems to have been confirmed by the slow but sustained advance in prices, f. o. b., which begun early in 1898, but which had only a moderate effect in increasing the output.

"In addition to the growing European demand for high grade rock the situation

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in Florida has been considerably improved by the steady reduction of stocks on hand. The statistics of stocks carried forward at stated periods in 1897 and 1898 are shown as follows:

	1897.	1898.
January 1	135,494	86,064
April 1	133,714	85,182
July 1	94,514	65,632
October 1	64,694	43,579

"The exhaustion of small mining properties and the increasing difficulties of mining are placing the industry under the control of comparatively few concerns. Detailed figures in this connection were given in the report for 1897, and as no discoveries of importance have been made during 1898, although the prospecting forces have been continuously in the field, the exhaustion of such properties is naturally now more apparent than it was twelve months ago. The difficulties of mining are also increasing, as at the lower levels the removal of water greatly impedes operations and increases cost.

"The miners who have survived the speculative era of the past few years, profiting by their experiences and appreciating more fully the growing value of their unworked land, are working more in harmony and with a view of obtaining a fair profit. The indications are that the industry has passed the speculative period and is settling down as a legitimate business.

"In the early days of the industry the unfortunate impression that the high grade deposits of Florida were practically inexhaustible was created in the minds of both miners and manufacturers by the report of a well known American statistician estimating the valuable deposits of high grade rock in Florida at $133,000,000. Experience and ascertained facts have proven this estimate to have been erroneous and misleading, for after nine years of exploitation and actual shipment of only 2,134,895 tons, so many supposedly 'unlimited deposits' have been abandoned as exhausted, and miners are daily meeting with increasing difficulties in their work.

"Miners and manufacturers have alike suffered severely from this impression, and are to be congratulated on the healthier conditions of the industry—the conservative miners are obtaining better prices for their phosphate and manufacturers are having the cost of their raw material on a more stable basis.

"While the improved prices will no doubt stimulate production it is probable that the prospective increase cannot more than meet the growing demand of Europe and the increasing requirements of the new foreign and colonial market.

"It should also be clearly understood that the f. o. b. market price of to-day no more than returns a reasonable remuneration to the miner for the increasing difficulties of mining, the cost and steady depreciation of plant and the progressive exhaustion of mining property, and if the demand for Florida high grade rock continues to increase at the average rate of the last three years the trend of business will be toward a higher level."

Patents Granted.

627,452—PROCESS OF MANUFACTURING GUMS FOR VARNISHES, ETC.—Edward M. Beck, Akron, Ohio. Filed July 19, 1897. Issued June 20, 1899.

627,453—GUM FOR VARNISHES, ETC.—Edward M. Beck, Akron, Ohio. Filed July 19, 1897. Issued June 20, 1899.

627,567—GLUE-SPREADING MACHINE.—Wm. C. Bosenbury, Richmond, Ind. Filed Aug. 30, 1898. Issued June 27, 1899.

627,604—POWER MECHANISM FOR PUMPING OIL WELLS.—Charles E. Sutton, Toledo, Ohio. Filed March 8, 1897. Issued June 27, 1899.

627,612—BOTTLE-CLEANING APPARATUS.—Bernhard Fischer, Richard H. Borowski and Theodore P. Goebel, Detroit, Mich. Filed April 8, 1899. Issued June 27, 1899.

627,642—MANUFACTURE OF OINTMENTS.—Thomas G. F. Hesketh, Towcester, England. Filed Oct. 24, 1898. Issued June 27, 1899.

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NOTE—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. The prices current will be found on page 37.

Saturday Evening, July 8, 1899.

Business has been restricted during the past week by the holidays and by the fact that many firms are taking a semi-annual account of stock. Except for this interference, the amount of business done would have been fully up to the average. Prices show few changes and rule from steady to firm. Gambier is in an unsettled position and sumac is firmer. Other dyes are featureless.

ALBUMEN.—Conditions remain unchanged. New crop goods have not reached this market and consumers are purchasing in a hand-to-mouth manner. Prices are unchanged and steady and prime quality egg is offered at 62@68c., as to seller. The foreign market for egg is reported firm, with a higher tendency. Blood is quoted at 16c. for imported and 15@15½c. for domestic, as to seller.

ANILINE OIL AND SALT.—Demand is small and offerings are large. Prices, however, remain fairly steady. We quote: Oil, 8¾@9½c.; salt, prime white crystals, 7⅞@9c., as to seller.

CUTCH.—There is an ordinary consuming demand. Stocks of the higher grades are somewhat limited, but the lower grades are still freely offered. We quote: Bale, 4@5c.; ordinary, in boxes, 4½@7c.; fine, in boxes, 7½@9c. In England cutch is very firm, owing to small stocks and reduced shipments, which are now practically over for this season.

DEXTRINE.—All kinds are in good request at full figures. Domestic potato dextrine is scarce and manufacturers of corn dextrine find difficulty in keeping up with their contract deliveries. We quote: Imported, 5⅞@6c.; domestic, 5½@6c.; corn, 2½@3c.

DIVI DIVI.—There have been no new arrivals during the past week and the several small arrivals of last week have gone into store and are firmly held at $42.50@45, as to quantity and quality. Demand is limited to small lots. Goods to arrive can be bought at $40.

FUSTIC.—The market is quiet, but prices are unchanged and steady. Our Trieste letter, dated June 24, says: "Both stick and root are in ample supply, the former quoted at 4s. 11d., and the latter 4s. 9d. per cwt. in bulk, cost and freight, New York, or 4d. more in bags gross for net weight."

GAMBIER.—The Paramita has arrived with 9,361 bales of gambier, and the Isaac Reed is discharging 9,583 bales. This being the case it is expected that the deliveries for July will be fairly heavy, and certainly much larger than they were for June. The store stocks amount to about 34,000 bales in New York and 800 bales in Boston. There is very little inquiry for store gambier except for occasional jobbing quantities of selected and well dried goods. Offerings are freely made at 2.85@3¼c., as to quantity, and it is thought by many that a firm offer of 2.82½c. for a round lot would be accepted. Goods ex dock or ex vessel in port are offered at 2.80c., but buyers are very indifferent and the transactions are few. Goods on the way can be bought at 2¾@2.82½c. Singapore is somewhat easier and steamer shipment has been sold at 2.65c., and more could probably be bought at the same figure. In view of the present statistical position of gambier, consumers refuse to anticipate their future requirements. As can be seen from the following circular, the visible supply for the next four months is much in excess of the consuming requirements. Nevertheless, shipments continue and during the last half of June amounted to 900 tons by steamer, which will arrive here in August. The following circular, dated July 1, was issued by Messrs. F. R. Leonori & Co.:

	Bales.	Bales.
In store, New York	34,000	
In store, Boston	800	34,800
AFLOAT FOR AND AT NEW YORK.		
Sailer Isaac Reed, in port	9,583	
Sailer Paramita, due about July 5, 1899	9,361	
Steamers due in August, 1899	9,500	
Sailer Berlin, due about Aug. 15, 1899	8,000	
Sailer Maria, due about Oct. 1, 1899 (loading at Singapore, Kynance.)	10,500	46,944
AFLOAT FOR BOSTON.		
Sailer Freeman, due about Oct. 5, 1899	5,000	5,000
Visible supply to Nov. 1, 1899 (four months)		86,744
Total deliveries for consumption since Jan. 1, 1899 (six months)		69,880

The shipments of gambier from Singapore for the first six months of 1899 are reported as follows by Messrs. J. W. Phyfe & Co.:

	Tons		
	1899.	1898.	1897.
To United States	7,085	8,205	8,665
To Great Britain	7,305	5,735	7,275
To Continent	8,235	8,995	6,845
Totals	22,625	22,935	22,785

Cube gambier is in jobbing demand, and 4¼c. is now lowest for No. 1, while 4¾@5c. is generally asked. No. 2 cube is firm at 3¾@4c. There was no cube gambier on the Isaac Reed or the Paramita, and there is very little on the other vessels on the way. Singapore remains firm at 4½@5c. for first quality, and this has a tendency to discourage shipments.

INDIGO.—Demand continues good, and stocks are being gradually reduced. Prices are therefore firm, but no change has yet been made. We quote, as to grade and quantity: Bengal, low grade, 62½@67½c.; medium, 70@82½c.; high grade, 85c.@$1.25; Kurpahs, medium to good, 55@65c.; higher grades, 67½@82½c.; "J" (synthetic), 38c.

MADDER.—Smyrna, June 17: "Market firmer, but no quotable change in price. Sale of 15 bales at 22s. per cwt. f. o. b. Smyrna." The New York market is quiet but steady.

NUTGALLS.—Recent arrivals have relieved the scarcity somewhat, but prices remain firm at 15½@16c. for blue Aleppo and 15@15½c. for Chinese. There is a fair demand. Our Smyrna correspondent reports that market as bare of stocks on June 17.

PERSIAN BERRIES.—Quotations are steady at 6½@8c. The market is quiet and featureless. Our Smyrna letter, dated June 17, says: "Market quiet, stock 250 bags. Quotations: 16s. 6d.@22s. per cwt. f. o. b. Smyrna."

PRUSSIATE OF POTASH.—The market for yellow prussiate has become much less active, but holders continue to quote 19@19½c., as to quantity. Red is steady at 37@40c., as to quantity.

SAGO FLOUR.—Spot offerings are small and prices are firm at 3¾@4c. in consequence. Quotations for shipment are somewhat lower, and London reports little doing in that market, with shipment prices easier.

STARCH.—Demand continues good and no new features have put in an appearance. Prices are firm, particularly for potato starch, which is scarce. We quote, as to quantity and seller: Corn, pearl, in barrels, 1.44@1.60c., and in bags, 1.39@1.55c.; powdered, in barrels, 1.49@1.65c., and in bags, 1.44@1.60c.; potato, 4½@4¾c.; wheat, 5@6c.; rice, 7½@9c.

SUMAC.—Demand has increased during the past week, and consumers have taken fair quantities of spot goods. There has also been some speculative buying for July shipment. The offerings on spot have been greatly reduced and quotations have advanced to $55@60 for first quality, and $53@55 for second quality, as to quantity. Sicily advices reported decreased stocks with increased demand and an advancing market. Shipment prices vary as to seller and range $55@60 for No. 1 and $53@55 for No. 2, as to quantity. Our Trieste letter, dated June 24, says: "No business is to be reported. We quote prime Montenegro, $41.50 and second Albanian, $34.50 c. and f., New York."

TIN CRYSTALS.—The recent advances in the cost of pig tin has not yet affected quotations for tin crystals, but advances are expected. In the meantime prices are very firm at 20@21½c., as to style of package and quantity.

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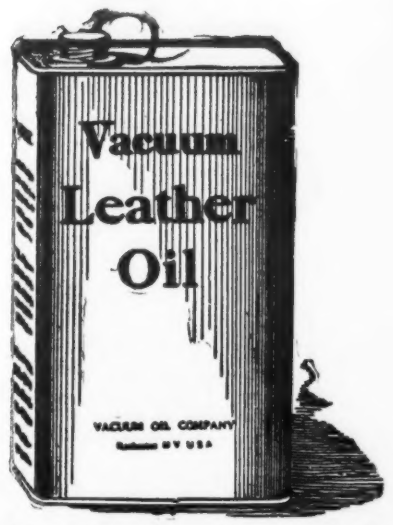

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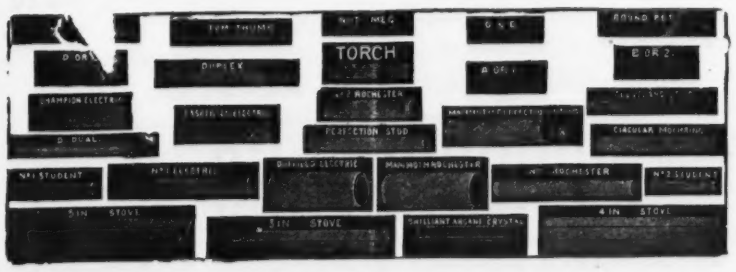

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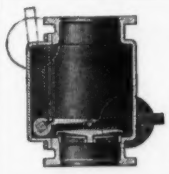

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